

January 16, 2009

Diana Mason
State of Utah
Division of Oil Gas and Mining
P.O. Box 145801
Salt Lake City, Utah 84114-5801

RE: Application for Permit to Drill—XTO Energy, Inc
LCU 1-16H

*Surface Location: 627' FNL & 210' FEL, NE/4 NE/4,
Target Location: 660' FNL & 660' FEL, NE/4 NE/4,
Section 16, T11S, R20E, SLB&M, Uintah County, Utah*

Dear Diana

On behalf of XTO Energy, Inc., Buys & Associates, Inc., respectfully submits the enclosed original and one copy of the Application for Permit to Drill (APD) for the above referenced Federal surface and SITLA mineral directional well. The location of the surface and target location as well as all points along the intended well bore path are within Cause No 259-01 and are not within 460 feet of any uncommitted tracts or the unit boundary. Included with the APD is the following supplemental information

Exhibit "A" - Survey plats, layouts and photos of the proposed well site;

Exhibit "B" - Proposed location maps with access and utility corridors;

Exhibit "C" - Production site layout,

Exhibit "D" - Directional Drilling Plan with Directional Survey

Exhibit "E" - Surface Use Plan with APD Certification;

Exhibit "F" - Typical BOP and Choke Manifold diagram;

Exhibit "G" - Cultural and Paleontological Clearance Reports

Thank you very much for your timely consideration of this application. Please feel free to contact myself or Ken Secrest of XTO Energy, Inc. at 435-722-4521 if you have any questions or need additional information.

Sincerely,

Don Hamilton

Don Hamilton
Agent for XTO Energy, Inc

cc. Jim Davis, SITLA

Fluid Mineral Group, BLM—Vernal Field Office (with BLM surface use request sundry notice)
Ken Secrest, XTO Energy, Inc (with BLM surface use request sundry notice)

RECEIVED
JAN 22 2009

DIV. OF OIL, GAS & MINING

FILE COPY

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>		5. MINERAL LEASE NO: ML-48772	6. SURFACE: Federal
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>		7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
2. NAME OF OPERATOR: XTO Energy, Inc.		8. UNIT or CA AGREEMENT NAME: Little Canyon Unit	
3. ADDRESS OF OPERATOR: PO Box 1360 CITY Roosevelt STATE UT ZIP 84066		9. WELL NAME and NUMBER: LCU 1-16H	
PHONE NUMBER: (435) 722-4521		10. FIELD AND POOL, OR WILDCAT: undesignated	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 627' FNL & 210' FEL, NE/4 NE/4, AT PROPOSED PRODUCING ZONE: 660' FNL & 660' FEL, NE/4 NE/4, <i>613 354X 4413514 Y 39.865988 -109.674690</i> <i>613 217X 4413502 Y 39.865894 -109.674291</i>		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENE 16 11S 20E S	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 15.38 miles south of Ouray, Utah		12. COUNTY: Uintah	13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 210'	16. NUMBER OF ACRES IN LEASE: 640	17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) 2,550'	19. PROPOSED DEPTH: 9,241	20. BOND DESCRIPTION: SITLA Blanket 104312 762	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5,360' GR	22. APPROXIMATE DATE WORK WILL START: 12/15/2008	23. ESTIMATED DURATION: 14 days	

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT
12-1/4"	9-5/8" J-55 ST 36#	2,231	see Drilling Plan
7-7/8"	5-1/2" N-80 LT 17#	9,241	see Drilling Plan
			9200' TVD

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- | | |
|--|--|
| <input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER | <input checked="" type="checkbox"/> COMPLETE DRILLING PLAN |
| <input type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER | <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER |

NAME (PLEASE PRINT) Don Hamilton

TITLE Agent for XTO Energy, Inc.

SIGNATURE Don Hamilton

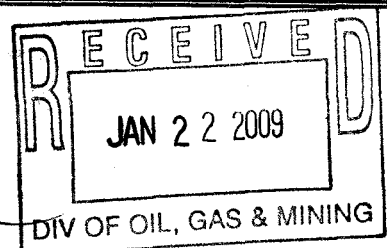
Approved by the 1/16/2009

Utah Division of
Oil, Gas and Mining

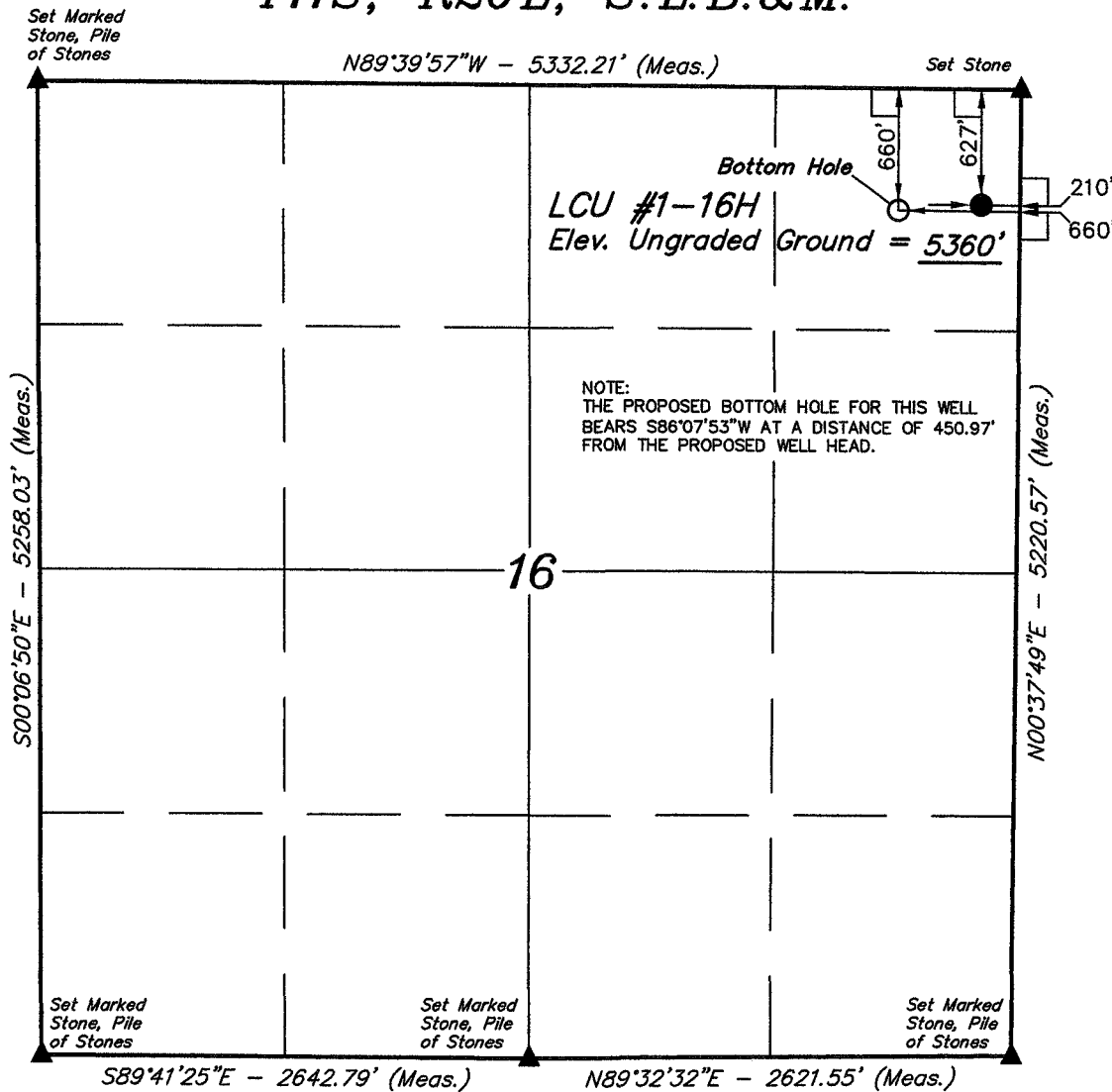
Date: 03-02-09

By: [Signature]

API NUMBER ASSIGNED: 43047 40493



T11S, R20E, S.L.B.&M.



LEGEND:

└─ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(NAD 83)
 LATITUDE = 39°51'56.65" (39.865736)
 LONGITUDE = 109°40'30.61" (109.675169)
 (NAD 27)
 LATITUDE = 39°51'56.78" (39.865772)
 LONGITUDE = 109°40'28.12" (109.674478)

XTO ENERGY, INC.

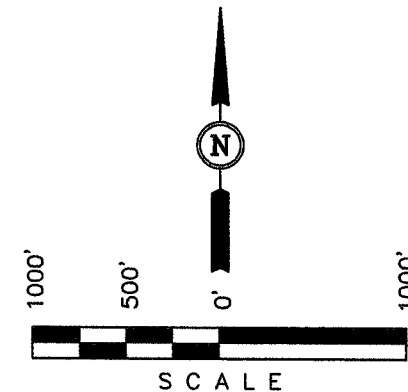
Well location, LCU #1-16H, located as shown in the NE 1/4 NE 1/4 of Section 16, T11S, R20E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 20, T10S, R20E, S.L.B.&M., TAKEN FROM THE BIG PACK MTN. NW QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5251 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Robert Kay
 REGISTERED LAND SURVEYOR
 REGISTRATION NO. 161319
 STATE OF UTAH

REVISED: 01-13-09

UINTAH ENGINEERING & LAND SURVEYING
 85 SOUTH 200 EAST - VERNAL, UTAH 84078
 (435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 08-23-06	DATE DRAWN: 08-28-06
PARTY B.B. T.H. S.L.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE XTO ENERGY, INC.	

XTO ENERGY INC.

LCU 1-16H

APD Data

September 18, 2008

Location: 627' FNL & 210' FEL, Sec. 16, T11S, R20E County: Uintah

State: Utah

Bottomhole Location: 660' FNL & 660' FEL, Sec. 16, T11S, R20E

GREATEST PROJECTED TD: 9241' MD/ 9200' TVD
APPROX GR ELEV: 5360'

OBJECTIVE: Wasatch/Mesaverde
Est KB ELEV: 5374' (14' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 2231'	2231' to 9241'
HOLE SIZE	12.25"	7.875"
MUD TYPE	FW/Spud Mud	KCl Based LSND / Gel Chemical
WEIGHT	8.80 ppg	8.6-9.2 ppg
VISCOSITY	NC	30-60 sec-qt ⁻¹
WATER LOSS	NC	8-15 cc/30 min

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes. The mud system will be monitored visually/manually.

2. CASING PROGRAM:

Surface Casing: 9.625" casing set at ±2231'MD/2200'TVD in a 12.25" hole filled with 8.8 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-2231'	2231'	36#	J-55	ST&C	2020	3520	394	8.921	8.765	2.57	4.47	4.91

Production Casing: 5.5" casing set at ±9241'MD/9200'TVD in a 7.875" hole filled with 9.20 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-9241'	9241'	17#	N-80	LT&C	6280	7740	348	4.892	4.767	1.80	2.22	2.22

Collapse and burst loads calculated at TVD with 0.1 psi/ft gas gradient back up.

3. WELLHEAD:

- A. Casing Head: Larkin Fig 92 (or equivalent), 9" nominal, 2,000 psig WP (4,000 psig test) with 9-5/8" 8rnd thread on bottom (or slip-on, weld-on) and 11-3/4" 8rnd thread on top.
- B. Tubing Head: Larkin Fig 612 (or equivalent), 6.456" nominal, 5,000 psig WP, 5-1/2" 8rnd female thread on bottom (or slip-on, weld-on), 8-5/8" 8rnd thread on top.

4. CEMENT PROGRAM:

- A. Surface: 9.625", 36#, J-55 (or equiv.), ST&C casing to be set at ±2231' in 12.25" hole.

LEAD:

±219 sx of Premium Plus V Blend. (Type V/Poz/Gel) or equivalent, with dispersant, fluid loss, accelerator, & LCM mixed at 11.0 ppg, 3.82 ft³/sk, 22.95 gal wtr/sx.

TAIL:

350 sx Class G or equivalent cement with bonding additive, LCM, dispersant, & fluid loss mixed at 15.6 ppg, 1.2 cuft/sx

Total estimated slurry volume for the 9.625" surface casing is 1256.9 ft³. Slurry includes 75% excess of calculated open hole annular volume to 2231'.

B. Production: 5.5", 17#, N-80 (or equiv.), LT&C casing to be set at ±9241' in 7.875" hole.

LEAD:

±304 sx of Premium Plus V Blend. (Type V/Poz/Gel) or equivalent, with dispersant, fluid loss, accelerator, & LCM mixed at 11.6 ppg, 3.10 ft³/sk, 17.71 gal wtr/sx.

TAIL:

400 sx Class G or equivalent cement with poz, bonding additive, LCM, dispersant, & fluid loss mixed at 13.0 ppg, 1.49 cuft/sx, 9.09 gal/sx.

Total estimated slurry volume for the 5.5" production casing is 1537.1 ft³. Slurry includes 15% excess of calculated open hole annular volume.

Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined from the caliper logs plus 15% or greater excess. The cement is designed to circulate on surface casing string. The production casing is designed for 1731' top of cement..

5. LOGGING PROGRAM:

- A. Mud Logger: The mud logger will come on at ^{surface}~~intermediate~~ casing point and will remain on the hole until TD. The mud will be logged in 10' intervals.
- B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (9241') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (9241') to 2231'. Run Gamma Ray to surface.

6. FORMATION TOPS:

Please see attached directional plan.

7. ANTICIPATED OIL, GAS, & WATER ZONES:

A.

Formation	Expected Fluids	TV Depth Top
Green River	Water/Oil Shale	604
Mahogany Bench Mbr.	Water/Oil Shale	1,374
Wasatch Tongue	Oil/Gas/Water	3,304
Green River Tongue	Oil/Gas/Water	3,644
Wasatch*	Gas/Water	3,784
Chapita Wells*	Gas/Water	4,704
Uteland Buttes	Gas/Water	5,804
Mesaverde*	Gas/Water	6,499
Castlegate	Gas/Water	9,179

- B. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.
- C. There are no known potential sources of H₂S.

D. The bottomhole pressure is anticipated to be between 4200 psi and 4600 psi.

E. According to the USGS, the Base of Moderately Saline Water is at 3819'.

8. **BOP EQUIPMENT:**

Surface will utilize a 500 psi or greater diverter.

Production hole will be drilled with a 3000 psi BOP stack.

Minimum specifications for pressure control equipment are as follows:

Ram Type: 11" Hydraulic double ram with annular, 3000 psi w.p.

Ram type preventers and associated equipment shall be tested to stack working pressure if isolated by test plug or to 70% of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10% in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

Annular type preventers (if used) shall be tested to 50% of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

As a minimum, the above test shall be performed:

- a. when initially installed:
- b. whenever any seal subject to test pressure is broken
- c. following related repairs: and
- d. at 30 day intervals

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s) shall be held open or the ball removed.

Annular preventers (if used) shall be functionally operated at least weekly.

Pipe and blind rams shall be activated each trip, however, this function need not be performed more than once a day.

A BOPE pit level drill shall be conducted weekly for each drilling crew.

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No.2 for equipment and testing requirements, procedures, etc., and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests. Pressure tests shall apply to all related well control equipment.

BOP systems shall be consistent with API RP53. Pressure tests will be conducted before drilling out from under casing strings which have been set and cemented in place. Test pressures for BOP equipment are as follows:

Annular BOP -- 1500 psi
Ram type BOP -- 3000 psi
Kill line valves -- 3000 psi
Choke line valves and choke manifold valves -- 3000 psi
Chokes -- 3000 psi
Casing, casinghead & weld -- 1500 psi
Upper kelly cock and safety valve -- 3000 psi
Dart valve -- 3000 psi

Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

The BLM in Vernal, UT shall be notified, at least 24 hours prior to initiating the pressure test, in order to have a BLM representative on location during pressure testing.

- a. The size and rating of the BOP stack is shown on the attached diagram.
- b. A choke line and a kill line are to be properly installed.
- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s), to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.
- e. See attached BOP & Choke manifold diagrams.

9. **COMPANY PERSONNEL:**

<u>Name</u>	<u>Title</u>	<u>Office Phone</u>	<u>Home Phone</u>
John Egelston	Drilling Engineer	505-333-3163	505-330-6902
Bobby Jackson	Drilling Superintendent	505-333-3224	505-486-4706
Jeff Jackson	Project Geologist	817-885-2800	



Well Name: LCU 1-16H

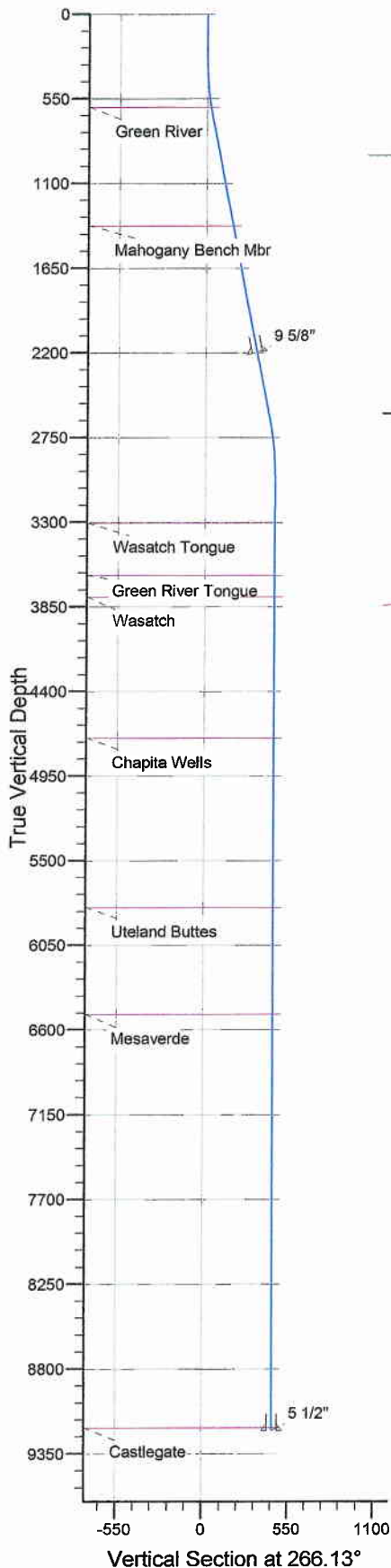
San Juan Division
Drilling Department

Calculation Method: Minimum Curvature
Geodetic Datum: North American Datum 1983
Lat: 39° 51' 56.650 N
Long: 109° 40' 30.608 W



Azimuths to True North
Magnetic North: 11.46°

Magnetic Field
Strength: 52526.2nT
Dip Angle: 65.80°
Date: 9/17/2008
Model: IGRF200510

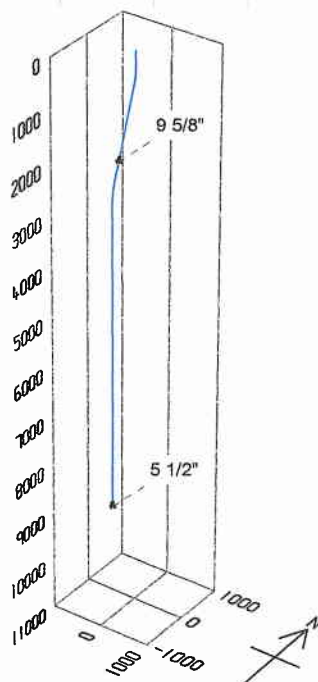
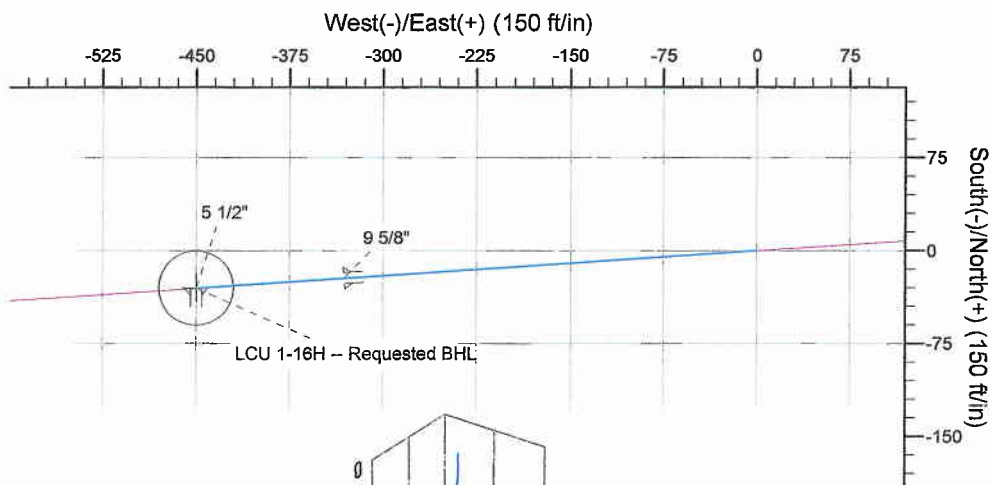


FORMATION TOP DETAILS

TVDP	MD	Formation
604.0	605.3	Green River
1374.0	1389.4	Mahogany Bench Mbr
3304.0	3344.9	Wasatch Tongue
3644.0	3684.9	Green River Tongue
3784.0	3824.9	Wasatch
4704.0	4744.9	Chapita Wells
5804.0	5844.9	Uteland Buttes
6499.0	6539.9	Mesaverde
9179.0	9219.9	Castlegate

CASING DETAILS

TVDP	MD	Name	Size
2200.0	2230.6	9 5/8"	9-5/8
9200.0	9240.9	5 1/2"	5-1/2



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.0	
3	664.5	10.93	266.13	662.3	-2.3	-34.6	3.00	266.13	34.7	
4	2676.5	10.93	266.13	2637.7	-28.1	-415.4	0.00	0.00	416.3	
5	3040.9	0.00	0.00	3000.0	-30.4	-449.9	3.00	180.00	451.0	
6	3540.9	0.00	0.00	3500.0	-30.4	-449.9	0.00	0.00	451.0	
7	9240.9	0.00	0.00	9200.0	-30.4	-449.9	0.00	0.00	451.0	

LCU 1-16H -- Requested BHL

XTO Energy

Natural Buttes Wells(NAD83)

LCU 1-16H

LCU 1-16H

LCU 1-16H

Plan: Permitted Wellbore

Standard Planning Report

17 September, 2008

XTO Energy, Inc.

Planning Report

Database: EDM 2003.14 Single User Db
Company: XTO Energy
Project: Natural Buttes Wells(NAD83)
Site: LCU 1-16H
Well: LCU 1-16H
Wellbore: LCU 1-16H
Design: Permitted Wellbore

Local Co-ordinate Reference: Well LCU 1-16H
TVD Reference: Rig KB @ 5374.0ft (Frontier #6)
MD Reference: Rig KB @ 5374.0ft (Frontier #6)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	3.00	266.13	400.0	-0.2	-2.6	2.6	3.00	3.00	0.00
500.0	6.00	266.13	499.6	-0.7	-10.4	10.5	3.00	3.00	0.00
600.0	9.00	266.13	598.8	-1.6	-23.5	23.5	3.00	3.00	0.00
605.3	9.16	266.13	604.0	-1.6	-24.3	24.3	3.00	3.00	0.00
Green River									
664.5	10.93	266.13	662.3	-2.3	-34.6	34.7	3.00	3.00	0.00
700.0	10.93	266.13	697.1	-2.8	-41.3	41.4	0.00	0.00	0.00
800.0	10.93	266.13	795.3	-4.1	-60.2	60.4	0.00	0.00	0.00
900.0	10.93	266.13	893.5	-5.4	-79.2	79.3	0.00	0.00	0.00
1,000.0	10.93	266.13	991.7	-6.6	-98.1	98.3	0.00	0.00	0.00
1,100.0	10.93	266.13	1,089.9	-7.9	-117.0	117.3	0.00	0.00	0.00
1,200.0	10.93	266.13	1,188.1	-9.2	-135.9	136.2	0.00	0.00	0.00
1,300.0	10.93	266.13	1,286.3	-10.5	-154.9	155.2	0.00	0.00	0.00
1,389.4	10.93	266.13	1,374.0	-11.6	-171.8	172.2	0.00	0.00	0.00
Mahogany Bench Mbr									
1,400.0	10.93	266.13	1,384.4	-11.8	-173.8	174.2	0.00	0.00	0.00
1,500.0	10.93	266.13	1,482.6	-13.0	-192.7	193.2	0.00	0.00	0.00
1,600.0	10.93	266.13	1,580.8	-14.3	-211.6	212.1	0.00	0.00	0.00
1,700.0	10.93	266.13	1,679.0	-15.6	-230.6	231.1	0.00	0.00	0.00
1,800.0	10.93	266.13	1,777.2	-16.9	-249.5	250.1	0.00	0.00	0.00
1,900.0	10.93	266.13	1,875.4	-18.2	-268.4	269.0	0.00	0.00	0.00
2,000.0	10.93	266.13	1,973.5	-19.4	-287.3	288.0	0.00	0.00	0.00
2,100.0	10.93	266.13	2,071.7	-20.7	-306.3	307.0	0.00	0.00	0.00
2,200.0	10.93	266.13	2,169.9	-22.0	-325.2	325.9	0.00	0.00	0.00
2,230.6	10.93	266.13	2,200.0	-22.4	-331.0	331.7	0.00	0.00	0.00
9 5/8"									
2,300.0	10.93	266.13	2,268.1	-23.3	-344.1	344.9	0.00	0.00	0.00
2,400.0	10.93	266.13	2,366.3	-24.6	-363.0	363.9	0.00	0.00	0.00
2,500.0	10.93	266.13	2,464.5	-25.8	-382.0	382.8	0.00	0.00	0.00
2,600.0	10.93	266.13	2,562.7	-27.1	-400.9	401.8	0.00	0.00	0.00
2,676.5	10.93	266.13	2,637.7	-28.1	-415.4	416.3	0.00	0.00	0.00
2,700.0	10.23	266.13	2,660.9	-28.4	-419.7	420.6	3.00	-3.00	0.00
2,800.0	7.23	266.13	2,759.7	-29.4	-434.8	435.8	3.00	-3.00	0.00
2,900.0	4.23	266.13	2,859.2	-30.1	-444.8	445.8	3.00	-3.00	0.00
3,000.0	1.23	266.13	2,959.1	-30.4	-449.5	450.5	3.00	-3.00	0.00
3,040.9	0.00	0.00	3,000.0	-30.4	-449.9	451.0	3.00	-3.00	0.00
3,100.0	0.00	0.00	3,059.1	-30.4	-449.9	451.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,159.1	-30.4	-449.9	451.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,259.1	-30.4	-449.9	451.0	0.00	0.00	0.00
3,344.9	0.00	0.00	3,304.0	-30.4	-449.9	451.0	0.00	0.00	0.00
Wasatch Tongue									
3,400.0	0.00	0.00	3,359.1	-30.4	-449.9	451.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,459.1	-30.4	-449.9	451.0	0.00	0.00	0.00
3,540.9	0.00	0.00	3,500.0	-30.4	-449.9	451.0	0.00	0.00	0.00
LCU 1-16H -- Requested BHL									
3,600.0	0.00	0.00	3,559.1	-30.4	-449.9	451.0	0.00	0.00	0.00
3,684.9	0.00	0.00	3,644.0	-30.4	-449.9	451.0	0.00	0.00	0.00
Green River Tongue									
3,700.0	0.00	0.00	3,659.1	-30.4	-449.9	451.0	0.00	0.00	0.00

XTO Energy, Inc.

Planning Report

Database: EDM 2003.14 Single User Db
Company: XTO Energy
Project: Natural Buttes Wells(NAD83)
Site: LCU 1-16H
Well: LCU 1-16H
Wellbore: LCU 1-16H
Design: Permitted Wellbore

Local Co-ordinate Reference: Well LCU 1-16H
TVD Reference: Rig KB @ 5374.0ft (Frontier #6)
MD Reference: Rig KB @ 5374.0ft (Frontier #6)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,800.0	0.00	0.00	3,759.1	-30.4	-449.9	451.0	0.00	0.00	0.00
3,824.9	0.00	0.00	3,784.0	-30.4	-449.9	451.0	0.00	0.00	0.00
Wasatch									
3,900.0	0.00	0.00	3,859.1	-30.4	-449.9	451.0	0.00	0.00	0.00
4,000.0	0.00	0.00	3,959.1	-30.4	-449.9	451.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,059.1	-30.4	-449.9	451.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,159.1	-30.4	-449.9	451.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,259.1	-30.4	-449.9	451.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,359.1	-30.4	-449.9	451.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,459.1	-30.4	-449.9	451.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,559.1	-30.4	-449.9	451.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,659.1	-30.4	-449.9	451.0	0.00	0.00	0.00
4,744.9	0.00	0.00	4,704.0	-30.4	-449.9	451.0	0.00	0.00	0.00
Chapita Wells									
4,800.0	0.00	0.00	4,759.1	-30.4	-449.9	451.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,859.1	-30.4	-449.9	451.0	0.00	0.00	0.00
5,000.0	0.00	0.00	4,959.1	-30.4	-449.9	451.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,059.1	-30.4	-449.9	451.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,159.1	-30.4	-449.9	451.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,259.1	-30.4	-449.9	451.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,359.1	-30.4	-449.9	451.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,459.1	-30.4	-449.9	451.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,559.1	-30.4	-449.9	451.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,659.1	-30.4	-449.9	451.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,759.1	-30.4	-449.9	451.0	0.00	0.00	0.00
5,844.9	0.00	0.00	5,804.0	-30.4	-449.9	451.0	0.00	0.00	0.00
Uteland Buttes									
5,900.0	0.00	0.00	5,859.1	-30.4	-449.9	451.0	0.00	0.00	0.00
6,000.0	0.00	0.00	5,959.1	-30.4	-449.9	451.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,059.1	-30.4	-449.9	451.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,159.1	-30.4	-449.9	451.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,259.1	-30.4	-449.9	451.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,359.1	-30.4	-449.9	451.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,459.1	-30.4	-449.9	451.0	0.00	0.00	0.00
6,539.9	0.00	0.00	6,499.0	-30.4	-449.9	451.0	0.00	0.00	0.00
Mesaverde									
6,600.0	0.00	0.00	6,559.1	-30.4	-449.9	451.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,659.1	-30.4	-449.9	451.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,759.1	-30.4	-449.9	451.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,859.1	-30.4	-449.9	451.0	0.00	0.00	0.00
7,000.0	0.00	0.00	6,959.1	-30.4	-449.9	451.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,059.1	-30.4	-449.9	451.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,159.1	-30.4	-449.9	451.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,259.1	-30.4	-449.9	451.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,359.1	-30.4	-449.9	451.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,459.1	-30.4	-449.9	451.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,559.1	-30.4	-449.9	451.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,659.1	-30.4	-449.9	451.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,759.1	-30.4	-449.9	451.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,859.1	-30.4	-449.9	451.0	0.00	0.00	0.00
8,000.0	0.00	0.00	7,959.1	-30.4	-449.9	451.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,059.1	-30.4	-449.9	451.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,159.1	-30.4	-449.9	451.0	0.00	0.00	0.00

XTO Energy, Inc.

Planning Report

Database: EDM 2003.14 Single User Db
Company: XTO Energy
Project: Natural Buttes Wells(NAD83)
Site: LCU 1-16H
Well: LCU 1-16H
Wellbore: LCU 1-16H
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Local Co-ordinate Reference: Well LCU 1-16H
TVD Reference: Rig KB @ 5374.0ft (Frontier #6)
MD Reference: Rig KB @ 5374.0ft (Frontier #6)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,300.0	0.00	0.00	8,259.1	-30.4	-449.9	451.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,359.1	-30.4	-449.9	451.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,459.1	-30.4	-449.9	451.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,559.1	-30.4	-449.9	451.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,659.1	-30.4	-449.9	451.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,759.1	-30.4	-449.9	451.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,859.1	-30.4	-449.9	451.0	0.00	0.00	0.00
9,000.0	0.00	0.00	8,959.1	-30.4	-449.9	451.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,059.1	-30.4	-449.9	451.0	0.00	0.00	0.00
9,200.0	0.00	0.00	9,159.1	-30.4	-449.9	451.0	0.00	0.00	0.00
9,219.9	0.00	0.00	9,179.0	-30.4	-449.9	451.0	0.00	0.00	0.00
Castlegate									
9,240.9	0.00	0.00	9,200.0	-30.4	-449.9	451.0	0.00	0.00	0.00
5 1/2"									

Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
LCU 1-16H -- Requestec	0.00	0.00	3,500.0	-30.4	-449.9	3,115,803.89	2,152,305.82	39° 51' 56.349 N	109° 40' 36.377 W
- plan hits target									
- Circle (radius 30.0)									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
2,230.6	2,200.0	9 5/8"	9-5/8	12-1/4
9,240.9	9,200.0	5 1/2"	5-1/2	7-7/8

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
605.3	604.0	Green River		0.00	
1,389.4	1,374.0	Mahogany Bench Mbr		0.00	
3,344.9	3,304.0	Wasatch Tongue		0.00	
3,684.9	3,644.0	Green River Tongue		0.00	
3,824.9	3,784.0	Wasatch		0.00	
4,744.9	4,704.0	Chapita Wells		0.00	
5,844.9	5,804.0	Uteland Buttes		0.00	
6,539.9	6,499.0	Mesaverde		0.00	
9,219.9	9,179.0	Castlegate		0.00	

SURFACE USE PLAN

Name of Operator: XTO Energy, Inc.
Address: P.O. Box 1360;
Roosevelt, Utah 84066
Well Location: LCU 1-16H
Surface Location: 627' FNL & 210' FEL, NE/4 NE/4,
Target Location: 660' FNL & 660' FEL, NE/4 NE/4,
Section 16, T11S, R20E, SLB&M, Uintah County, Utah

The surface owner or surface owner representative and dirt contractor will be provided with an approved copy of the surface use plan of operations and approved conditions of approval before initiating construction.

The BLM onsite inspection for the referenced well was conducted on Tuesday, October 24, 2006 at approximately 9:45 am. In attendance at the onsite inspections were the following individuals:

Karl Wright	Nat. Res. Prot. Spec.	BLM – Vernal
Amy Torres	Wildlife Biologist	BLM – Vernal
Ken Secrest	Regulatory Coordinator =	XTO Energy, Inc.
Brandon Bowthorpe	Surveyor	Uintah Engineering
Billy McClure	Foreman	LaRose Construction
Randy Jackson	Foreman	Jackson Construction
Don Hamilton	Agent	Buys & Associates, Inc.

1. Location of Existing Roads:

- a. The proposed well site is located approximately 15.38 miles southeast of Ouray, Utah.
- b. Directions to the proposed well site have been attached at the end of Exhibit B.
- c. The use of roads under State and County Road Department maintenance are necessary to access the Little Canyon Unit area. However, an encroachment permit is not anticipated since no upgrades to the State or County Road system are proposed at this time.
- d. All existing roads will be maintained and kept in good repair during all phases of operation.
- e. Vehicle operators will obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.
- f. Since no improvements are anticipated to the State, County, Tribal or BLM access roads no topsoil striping will occur.
- g. An off-lease federal Right-of-Way is not anticipated for the access road and utility corridors since both are located entirely within the Little Canyon Unit area.

2. Planned Access Roads:

- a. From the proposed LCU 13-10H access road an access is proposed trending southwest approximately 0.4 miles along new disturbance to the proposed well site. The access crosses no significant drainages.
- b. A road design plan is not anticipated at this time.
- c. The proposed access road will consist of a 24' travel surface within a 30' disturbed area across entirely BLM and surface.
- d. BLM approval to construct and utilize the proposed access road is requested with this application.
- e. A maximum grade of 10% will be maintained throughout the project.
- f. No turnouts are proposed since adequate site distance exists in all directions.
- g. No low-water crossings and one culvert as the road enters the pad is anticipated. Adequate drainage structures will be incorporated into the road.
- h. No surfacing material will come from federal or Indian lands.
- i. No gates or cattle guards are anticipated at this time.
- j. Surface disturbance and vehicular travel will be limited to the approved location access road.
- k. All access roads and surface disturbing activities will conform to the standards outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development (Gold Book – Fourth Edition - Revised 2007).
- l. The operator will be responsible for all maintenance of the access road including drainage structures.

3. Location of Existing Wells:

- a. Exhibit B has a map reflecting these wells within a one mile radius of the proposed well.

4. Location of Existing and/or Proposed Production Facilities:

- a. All permanent structures will be painted a flat, non-reflective Covert Green /Carlsbad Canyon to match the standard environmental colors. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.
- b. Site security guidelines identified in 43 CFR 3163.7-5 and Onshore Oil and Gas Order No. 3 will be adhered to.
- c. A gas meter run will be constructed and located on lease within 500 feet of the wellhead. Meter runs will be housed and/or fenced. All gas production and measurement shall comply with the provisions of 43 CFR 3162. 7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.
- d. A tank battery will be constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank. All loading lines

and valves will be placed inside the berm surrounding the tank battery. All liquid hydrocarbons production and measurement shall conform to the provisions of 43 CFR 3162.7-3 and Onshore Oil and Gas Order No. 4 and Onshore Oil and Gas Order No. 5 for natural gas production and measurement.

- e. Any necessary pits will be properly fenced to prevent any wildlife and livestock entry.
- f. All access roads will be maintained as necessary to prevent erosion and accommodate year-round traffic. The road will be maintained in a safe useable condition.
- g. The site will require periodic maintenance to ensure that drainages are kept open and free of debris, ice, and snow, and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.
- h. A pipeline corridor containing a single steel gas pipeline is associated with this application and is being applied for at this time. The proposed pipeline corridor will leave the east side of the well site and traverse 2,066' northeast to the proposed LCU 13-10H pipeline corridor. The pipeline will then traverse east 400' along the proposed LCU 13-10H pipeline corridor to the existing BPU area pipeline.
- i. The new segment of gas pipeline will be a 12" or less surface laid line within a 30' wide pipeline corridor.
- j. Construction of the pipeline corridor will temporarily utilize the 30' disturbed width for the road for a total disturbed width of 60' for the road and pipeline corridors. The use of the proposed well site and access roads will facilitate the staging of the pipeline corridor construction.
- k. XTO Energy, Inc. intends to surface install the pipeline and connect the pipeline together utilizing conventional welding technology.

5. Location and Type of Water Supply:

- a. No water supply pipelines will be laid for this well.
- b. No water well will be drilled for this well.
- c. Drilling water for this will be hauled on the road(s) shown in Exhibit B.
- d. Water will be hauled from one of the following sources:
 - o Water Permit # 43-10991, Section 9, T8S, R20E;
 - o Water Permit #43-2189, Section 33, T8S, R20E;
 - o Water Permit #49-2158, Section 33, T8S, R20E;
 - o Water Permit #49-2262, Section 33, T8S, R20E;
 - o Water Permit #49-1645, Section 5, T9S, R22E;
 - o Water Permit #43-9077, Section 32, T6S, R20E;
 - o Tribal Resolution 06-183, Section 22, T10S, R20E;

6. Source of Construction Material:

- a. The use of materials will conform to 43 CFR 3610.2-3.
- b. No construction materials will be removed from Ute Tribal or BLM lands.
- c. If any gravel is used, it will be obtained from a state approved gravel pit.

7. Methods of Handling Waste:

- a. All wastes associated with this application will be contained and disposed of utilizing approved facilities.
- b. Drill cuttings will be contained and buried on site.
- c. The reserve pit will be located outboard of the location and along the south side of the pad.
- d. The reserve pit will be constructed so as not to leak, break, or allow any discharge.
- e. The reserve pit will be lined with 16 mil minimum thickness plastic nylon reinforced liner material. The liner will overlay a felt liner pad only if rock is encountered during excavation. The pit liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit. Pit walls will be sloped no greater than 2:1. A minimum 2-foot freeboard will be maintained in the pit at all times during the drilling and completion operation.
- f. The reserve pit has been located in cut material. Three sides of the reserve pit will be fenced before drilling starts. The fourth side will be fenced as soon as drilling is completed, and shall remain until the pit is dry. After the reserve pit has dried, all areas not needed for production will be rehabilitated.
- g. No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completion of the well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of the well.
- h. Trash will be contained in a trash cage and hauled away to an approved disposal site as necessary but no later than at the completion of drilling operations. The contents of the trash container will be hauled off periodically to the approved Uintah County Landfill near Vernal, Utah.
- i. Produced fluids from the well other than water will be produced into a test tank until such time as construction of production facilities is completed. Any spills of oil, gas, salt water or other produced fluids will be cleaned up and removed.
- j. After initial clean-up, a 400 bbl tank will be installed to contain produced waste water. This water will be transported from the tank to an approved XTO Energy, Inc. disposal well for disposal.
- k. Produced water from the production well will be disposed of at the RBU 13-11F or RBU 16-19F disposal wells in accordance with Onshore Order #7.
- l. Any salts and/or chemicals, which are an integral part of the drilling system, will be disposed of in the same manner as the drilling fluid.

- m. Sanitary facilities will be on site at all times during operations. Sewage will be placed in a portable chemical toilet and the toilet replaced periodically utilizing a licensed contractor to transport by truck the portable chemical toilet so that its contents can be delivered to the Vernal Wastewater Treatment Facility in accordance with state and county regulations.

8. Ancillary Facilities:

- a. Garbage Containers and Portable Toilets are the only ancillary facilities proposed in this application.
- b. No camps, airstrips or staging areas are proposed with this application.

9. Well Site Layout: (See Exhibit B)

- a. The well will be properly identified in accordance with 43 CFR 3162.6.
- b. Access to the well pad will be from the east.
- c. The pad and road designs are consistent with BLM specifications.
- d. A pre-construction meeting with responsible company representative, contractors and the BLM will be conducted at the project site prior to commencement of surface-disturbing activities. The pad and road will be construction-staked prior to this meeting.
- e. The pad has been staked at its maximum size; however it will be constructed smaller if possible, depending upon rig availability. Should the layout change, this application will be amended and approved utilizing a sundry notice.
- f. All surface disturbing activities, will be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.
- g. All cut and fill slopes will be such that stability can be maintained for the life of the activity.
- h. Diversion ditches will be constructed as shown around the well site to prevent surface waters from entering the well site area.
- i. The site surface will be graded to drain away from the pit to avoid pit spillage during large storm events.
- j. The stockpiled topsoil (first 6 inches or maximum available) will be stored in a windrow on the uphill side of the location to prevent any possible contamination. All topsoil will be stockpiled for reclamation in such a way as to prevent soil loss and contamination.
- k. Pits will remain fenced until site cleanup.
- l. The blooie line will be located at least 100 feet from the well head.
- m. Water injection may be implemented if necessary to minimize the amount of fugitive dust.

10. Plans for Restoration of the Surface (Interim Reclamation and Final Reclamation):

- a. Site reclamation for a producing well will be accomplished for portions of the site not required for the continued operation of the well.
- b. Upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1. Once the reserve pit is dry, the plastic nylon reinforced liner shall be torn and perforated before backfilling of the reserve pit. The reserve pit and that portion of the location not needed for production facilities/operations will be re-contoured to the approximate natural contours.
- c. Following BLM published Best Management Practices the interim reclamation will be completed within 90 days of completion of the well to reestablish vegetation, reduce dust and erosion and compliment the visual resources of the area.
 - a. All equipment and debris will be removed from the area proposed for interim reclamation and the pit area will be backfilled and re-contoured.
 - b. The area outside of the rig anchors and other disturbed areas not needed for the operation of the well will be re-contoured to blend with the surrounding area and reseeded at 12 lbs /acre with the following native grass seeds:
 - o Hy-Crested Wheat Grass (4 lbs / acre)
 - o Needle and Thread Grass (4 lbs / acre)
 - o Squirrel Tail (4 lbs / acre)
 - c. Reclaimed areas receiving incidental disturbance during the life of the producing well will be re-contoured and reseeded as soon as practical.
- d. The Operator will control noxious weeds along access road use authorizations, pipeline route authorizations, well sites, or other applicable facilities by spraying or mechanical removal. A list of noxious weeds may be obtained from the BLM or the appropriate County Extension Office. On BLM administered land, it is required that a Pesticide Use Proposal be submitted and approved prior to the application of herbicides, pesticides or possibly hazardous chemicals.
- e. Prior to final abandonment of the site, all disturbed areas, including the access road, will be scarified and left with a rough surface. The site will then be seeded and/or planted as prescribed by the BLM. The BLM recommended seed mix will be detailed within their approval documents.

11. Surface and Mineral Ownership:

- a. Surface Ownership – Federal under the management of the Bureau of Land Management - Vernal Field Office, 170 South 500 East, Vernal, Utah 84078; 435-781-4400.
- b. Mineral Ownership – State of Utah – under the management of the SITLA -State Office, 675 East 500 South, Suite 500, Salt Lake, City, Utah 84102-2818; 801-538-5100.

12. Other Information:

a. Operators Contact Information:

Title	Name	Office Phone	Mobile Phone	e-mail
Company Rep.	Ken Secrest	435-722-4521	435-828-1450	Ken_Secrest@xtoenergy.com
Agent	Don Hamilton	435-719-2018	435-719-2018	starpoint@etv.net

- b. An Independent Archeologist. has conducted a Class III archeological survey. A copy of the report is attached and has also been submitted under separate cover to the appropriate agencies by An Independent Archeologist.
- c. Alden Hamblin has conducted a paleontological survey. A copy of the report is attached and has also been submitted under separate cover to the appropriate agencies by Alden Hamblin.
- d. Our understanding of the results of the onsite inspection are:
 - a. No Threatened and Endangered flora and fauna species were found during the onsite inspection.
 - b. No drainage crossings that require additional State or Federal approval are being crossed.

Certification:

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exists; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application and that bond coverage is provided under XTO Energy, Inc's BLM bond UTB-000138 and SITLA bond 104312 762. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 16th day of January, 2009.

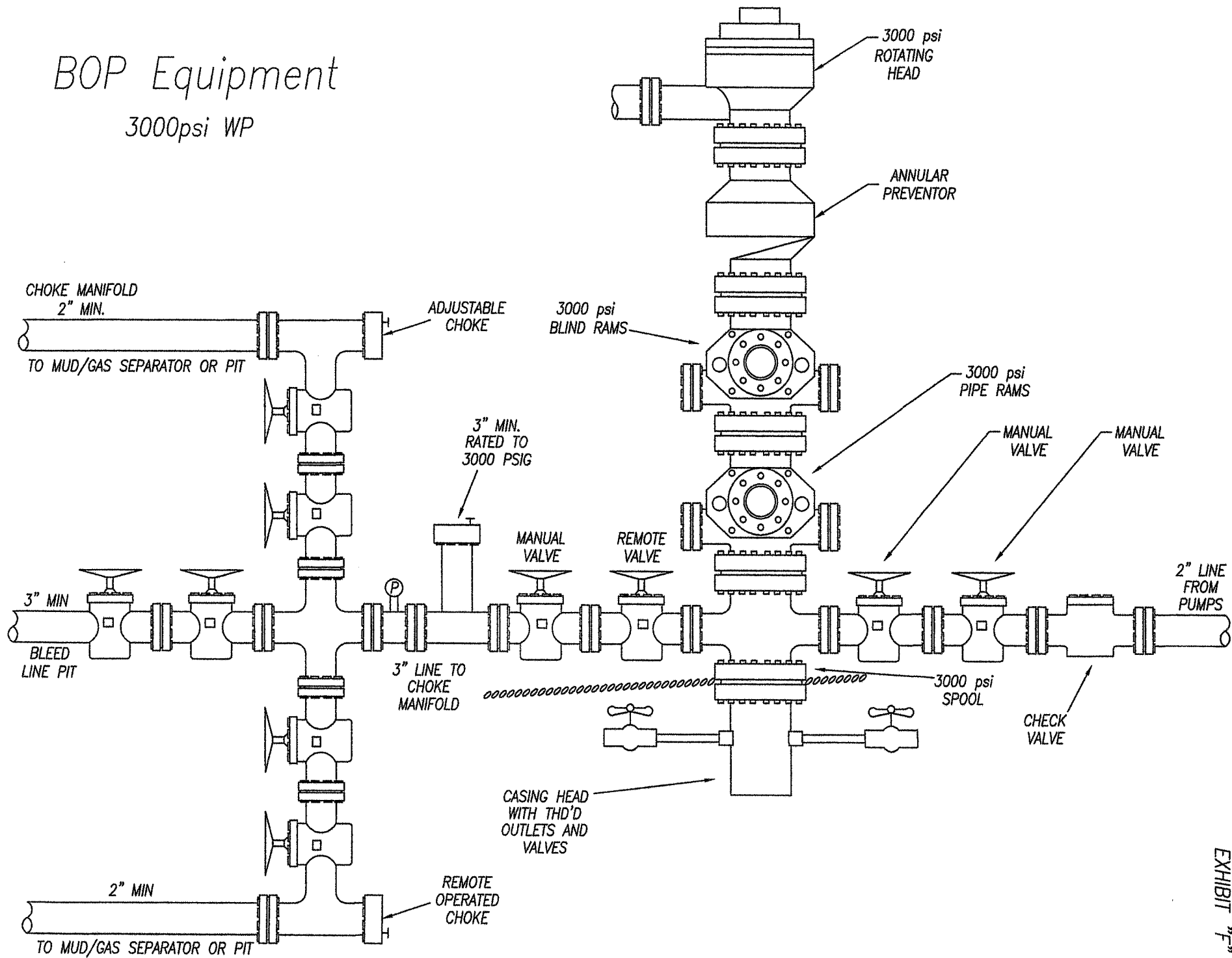
Don Hamilton

Don Hamilton -- Agent for XTO Energy, Inc.
2580 Creekview Road
Moab, Utah 84532

435-719-2018
starpoint@etv.net

BOP Equipment

3000psi WP



Dominion Exploration & Production, Inc.
Little Canyon Unit #1-16H: A Cultural
Resource Inventory for a well
its access and pipeline,
Uintah County, Utah.

By
James A. Truesdale

James A. Truesdale
Principal Investigator

Prepared For
Dominion Exploration and Production, Inc.
1400 North State Street
P.O.Box 1360
Roosevelt, Utah
84066

Prepared By
AN INDEPENDENT ARCHAEOLOGIST
P.O.Box 153
Laramie, Wyoming
82073

Utah Project # U-06-AY-205(b)

March 29, 2007

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- Figure 1. Location of the Dominion Exploration & Production Inc. proposed Little Canyon Unit (LCU) #1-16H well, its access and pipeline on 7.5'/1968 USGS quadrangle maps Big Pack Mountain NW and Big Pack Mountain, Uintah County, Utah. - - - - - 2
- Figure 2. View to north at the proposed Little Canyon Unit #1-16H well centerstake and well pad area. - - - - - 4

Introduction

An Independent Archaeologist (AIA) was contacted by a representative of Dominion Exploration & Production, Inc., to conduct a cultural resources investigation of the proposed Little Canyon Unit (LCU) #1-16H well, its access and pipeline. The location of the project area is the NE/NE 1/4 of Section 16, T11S, R20E Uintah County, Utah (Figure 1).

The proposed LCU #1-16H well's centerstake footage is 627' FNL, 210' FEL. The proposed LCU #1-16H well's centerstake Universal Transverse Mercator (UTM) centroid coordinate is Zone 12, North American Datum (NAD) 83, 06/13/309.93 mE 44/13/698.38 mN \pm 5m.

From an existing oil and gas field service road and pipeline, the access and pipeline parallel each other and trend 2000 feet (609.7 m) southwest to the proposed LCU #1-16H well pad.

The surface is administered by the United States (US), Department of Interior (DOI), Utah Bureau of Land Management (BLM), Vernal District Office, Book Cliffs Resource Area. A total of 28.36 acres (10 block, 18.36 linear) was surveyed. The fieldwork was conducted on March 13, 2007 by AIA archaeologists James Truesdale and CJ Truesdale. All the field notes and maps are located in the AIA office in Laramie, Wyoming.

File Search

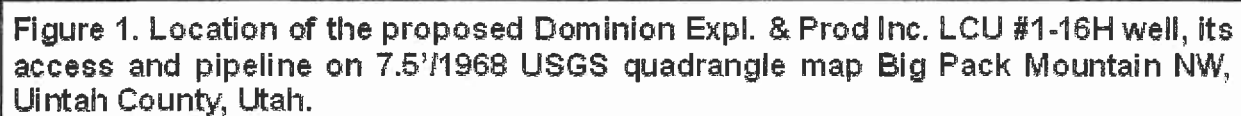
A file search was conducted by the Office of the Utah Division of State History (UDSH), Antiquities Section, Records Division on February 20, 2006. An additional file search was conducted at the Vernal BLM office in March of 2006 by the author.

An update of AIA's USGS 7.5'/1968 (photorevised 1987) Big Pack Mountain NW quadrangle map from the UDSH's Big Pack Mountain NW quadrangle base map occurred on November 8, 2003 and again on February 3, 2004. The UDSH SHPO GIS file search reported that no previous cultural resource management projects had been conducted in the general area (Section 16 of T11S R20E). In addition, no cultural resources (sites, isolates) were recorded during this past project.

After review of AIA base maps and cultural records, no additional projects had been previously conducted in the area.

Environment

Physiographically, the project is located in the Little Canyon Unit in the Uinta Basin, 14 miles south of Ouray, Utah. The Uinta Basin is structurally the lowest part of the Colorado Plateau geographical province (Thornbury 1965:425). The Uinta basin is a large, relatively flat, bowl shaped, east-west



asymmetrical syncline near the base of the Uinta Mountains. The topography is characteristic of sloping surfaces that incline northward and are mainly dip slopes on the harder layers of Green River and Uinta Formations (Stokes 1986).

A thick section of more than 9000 feet (2743.9 m) of early Tertiary rocks are exposed (Childs 1950). These rocks are mainly Paleocene and Eocene in age and consist of sandstone, clay and shale lacustrine, fluviatile, and deltaic continental deposits, most famous of which are the lacustrine Green River Beds.

The immediate project area is situated along the eastern slopes of Big Pack Mountain. The area is characterized as having steep ridges and/or buttes of relatively thick Uinta Formation sandstone, with thinner layers of clays and shale. The hills, ridges and buttes are dissected by several steep sided ephemeral drainage washes with wide flat alluvial plains. Portions of the desert hardpan and bedrock are covered with various sizes of residual angular to tabular pieces of eroding sandstone, clay and shale. Many of the higher hills and ridges exhibit ancient terrace (pediment) surfaces containing pebble and cobble gravel. Some of these pebbles and cobbles exhibit a dark brown to black desert varnish (patination). In addition, many of the hills and ridge slopes are covered with aeolian sand that may reach a depth of 100 to 150 cm.

Vegetation in the Little Canyon Unit area is characteristic of a low sagebrush community with shad scale and greasewood. Species observed in the project area include; big sagebrush (Artemesia tridentata), shadscale (Atriplex confertifolia), saltbush (Atriplex nuttallii), rabbitbrush (Chrysothamnus viscidiflorus), winterfat (Eurotia lanata), greasewood (Sarcobatus baileyi), wild buckwheat, (Erigonum ovvalifolium), desert trumpet (Erigonum inflatum), Indian rice grass (Oryzopsis hymenoides), western wheatgrass (Agropyron smithii), spiked wheatgrass (Agropyron sp.), crested wheatgrass (Agropyron cristatum), June grass (Koeleria cristata), cheat grass (Bromus tectorum), desert globemallow (Bromus tectorum), lupine (Lupinus sp.), larkspur (Delphinium sp.), Indian paintbrush (Castilleja chromosa), peppergrass (Lepidium perfoliatum), scalloped phacelia (Phacelia intergrifoliana), birdsage evening primrose (Oenothera deltoides), Russian thistle (Salsola kali), Russian knapweed (Centaurea repens), and prickly pear cactus (Opuntia sp.). In addition, a riparian community dominated by tall greasewood, cottonwood (Populus sp.), willow (Salix sp.), and salt cedar (tamarix) can be found along the Willow Creek Canyon bottom.

Little Canyon Unit (LCU) #1-16H

The proposed LCU #1-16H well pad is situated along a sequence of small eroded ridges at the bottom of the steep eastern talus slope of Big Pack Mountain (Figure 2). The well pad is also located in a large broad box like canyon. The sediments on the

well location are colluvial in nature. These colluvial deposits consist of shallow (≤ 15 cm), tan to light brown, poorly sorted, moderately compacted, sandy clay loam, mixed with small to large angular pieces of sandstone, clay and shale. Exposed and eroding tan to light brown sandstone and shale bedrock dominates the Willow Creek Canyon landscape. Vegetation consists of tall greasewood, low sagebrush, saltbush, rabbitbrush, bunchgrasses (wheatgrass, cheat grass, Indian rice-grass), barrel and prickly pear cactus. The proposed well location is 5385 feet (1641.76 m) AMSL.

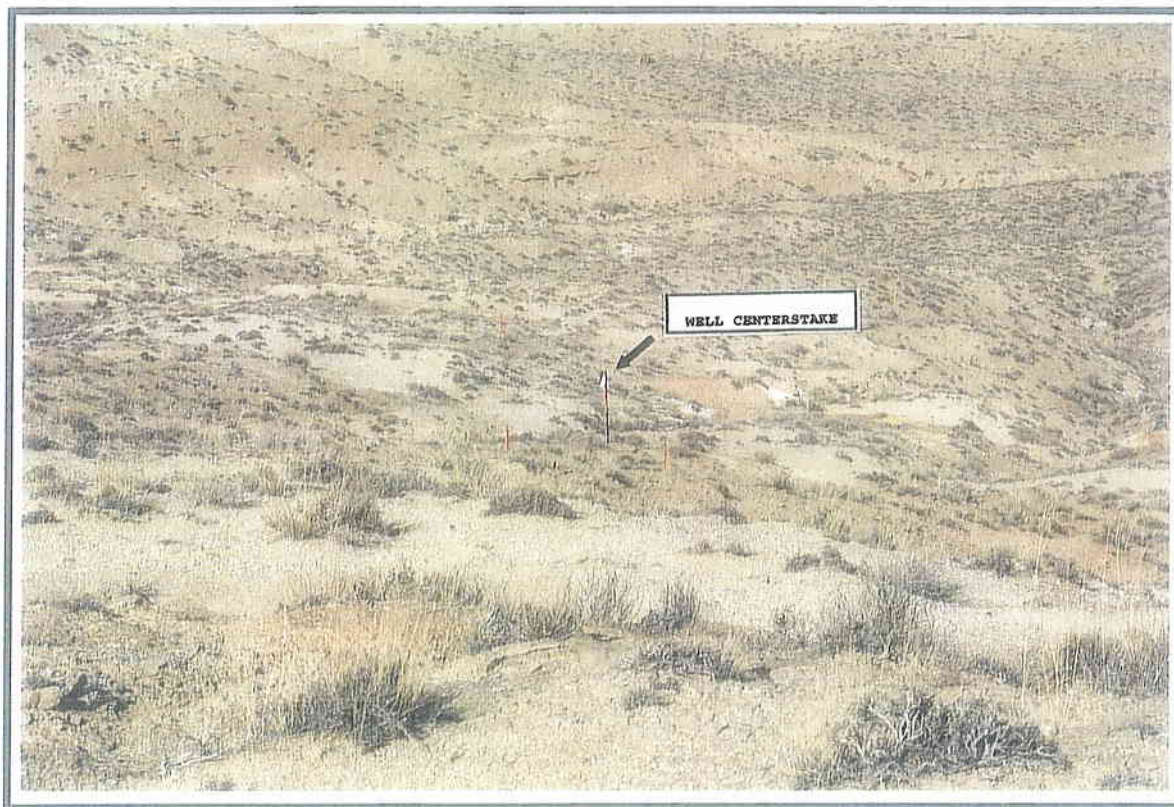


Figure 2. View to north at the proposed LCU #1-16H centerstake and well pad area.

From an existing oil and gas field service road and pipeline, the proposed access and pipeline parallel each other and trend southwest 2000 feet (609.7 m) to the proposed well pad. The access and pipeline trend southwest, up the northern side of a small ephemeral drainage wash to a large broad box like canyon, and the proposed well pad. Sediments along the access and pipeline are colluvial in nature. These colluvial sediments are shallow (< 10 cm) and consists of poorly sorted, loosely compacted, sandy clay loam. Rock fall boulders from the canyon walls can be found along the road. Vegetation along the access and pipeline consists of tall greasewood, low sagebrush, rabbitbrush, saltbush, Russian thistle, bunchgrasses (wheatgrass, cheat grass, Indian rice-grass), and prickly pear cactus.

Field Methods

A total of 10 acres was surveyed around the centerstake of the proposed LCU #1-16H well location to allow for relocation of the pad if necessary. The survey was accomplished by walking transects spaced no more than 15 meters apart. The proposed access and pipeline parallel each other. Each of these linear corridors surveyed is 2000 feet (304.8 m) long and 200 feet (60.8 m) wide, 9.18 acres. Thus, 18.36 linear acres was surveyed.

Geologic landforms (rockshelters, alcoves, ridge tops and saddles) and areas of subsurface exposure (ant hills, blowouts, rodent holes and burrow, eroding slopes and cutbanks) were examined with special care in order to locate cultural resources (sites, isolates) and possibly help assess a site's sedimentary integrity and potential for the presence and/or absence of buried intact cultural deposits. All exposures of sandstone cliff faces, alcoves or rockshelters, and talus slopes were surveyed.

When cultural materials are discovered, a more thorough survey of the immediate vicinity is conducted in order to locate any associated artifacts and to determine the horizontal extent (surface area) of the site. If no other artifacts are located during the search then the initial artifact was recorded as an isolated find. At times, isolated formal tools (typical end scrapers, projectile points) were drawn and measured. The isolate was then described and its location plotted on a U.S.G.S. topographic map and UTM coordinates are recorded.

When sites are found an Intermountain Antiquities Computer System (IMACS) form was used to record the site. At all sites, selected topographic features, site boundaries, stone tools and cultural features (hearths, foundations, trash dumps and trails) are mapped. Sites were mapped with a Brunton compass, Trimble Geophysical 3 and/or Garmin E-Trex GPS units, and pacing off distances from a mapping station (datum, PVC with aluminum tag). All debitage is inventoried using standard recording techniques (Truesdale et al 1995:7) according to material type, basic flake type, and so on. Selected (mostly complete) stone tools and projectile points are drawn and measured. All features (rockart panel(s), hearths, foundations, trash dumps and trails) are measured and described, while selected features are either drawn or photographed.

Site location data is recorded by a Trimble GeoExplorer 3 Global Positioning System (GPS) and Garmin GPS III Plus and/or a E-Trex GPS. Site elevation and Universal Transverse Mercator (UTM) grid data, its Estimated Position Error (EPE) and Dilution of Precision (DOP) were recorded. Using the GPS data, the site location was then placed on a USGS 7.5' quadrangle map.

Results

A total of 28.36 (10 block, 18.36 linear) acres were surveyed for cultural resources by AIA within and around the proposed Dominion Exploration & Production, Inc. Little Canyon Unit (LCU) #1-16H well, and along its access and pipeline. No cultural materials (sites and/or isolates) were recorded during the survey for the proposed LCU #1-16H well pad, its access and pipeline.

A moderate scatter of modern trash (plastic bottles, sanitary food cans, miscellaneous metal, wire, green, brown and clear glass bottles and bottle fragments, foam insulation, etc.) can be found on and surrounding the existing well pads and along the existing oil and gas field service roads in the Little Canyon Unit area.

Recommendations

A total of 28.36 (10 block, 18.36 linear) acres were surveyed for cultural resources by AIA within and around the proposed Dominion Exploration & Production, Inc. Little Canyon Unit #1-16H well, and along its access and pipeline. No historic properties (sites, isolates) were recorded during the survey.

A moderate scatter of modern trash (plastic bottles, sanitary food cans, miscellaneous metal, wire, green, brown and clear glass bottles and bottle fragments, foam insulation, etc.) can be found on and surrounding the existing well pads and along the existing oil and gas field service roads in the Little Canyon Unit area.

Sediments on and surrounding the proposed well pad, and along its access and pipeline are shallow to moderately deep. However, the possibility of buried and/or intact cultural materials on the proposed well pad or along its access and pipeline is low. No cultural resources (historic properties, isolates) were recorded during the survey for the proposed LCU #1-16H well, its access and pipeline. Therefore, no additional archaeological work is necessary and clearance is recommended for the construction of the Little Canyon Unit #1-16H well pad, its access, and pipeline.

REFERENCES CITED

Childs, O.E.

1950 Geologic history of the Uinta Basin, Utah Geological and Mineralogical Survey. Guidebook to the Geology of Utah, No. 5:49-59.

Stokes, William D.

1986 Geology of Utah. Contributions by the Utah Museum of Natural History, and the Utah Geological and Mineral Survey Department of Natural Resources. Utah Museum of Natural History, Occasional Papers, No. 6.

Thornbury, William D.

1965 Regional Geomorphology of the United States. John Wiley & Sons, Inc.

Truesdale, James A., Kathleen E Hiatt, and Clifford Duncan

1995 Cultural Resource Inventory of the Proposed Ouray Gravel Pit Location, Uintah-Ouray Ute Reservation, Uintah County, Utah. Report prepared for U & W Construction, Ft. Duchesne, Utah by AIA, Laramie, Wyoming.

PALEONTOLOGY EVALUATION SHEET

PROJECT: (84) Dominion Well LCU #1-16H

LOCATION: Fifteen miles south of Ouray, Utah. Section 16, 627' FNL 210' FEL, T11S, R20E, Uintah County, Utah.

OWNERSHIP: PRIV[] STATE[X] BLM[] USFS[] NPS[] IND[] MIL[] OTHER[]

DATE: September 20, 2006

GEOLOGY/TOPOGRAPHY: Green River Formation, upper part, Eocene Age. Road and pipeline come in from the northeast from the proposed road to LCU#13-10H. The road follows a spur, then goes west to the location. Location is on a moderately steep east slope and has interbedded shales and sandstone. There is a gully down south side and one east from the center stake. There is also a gully on the north.

PALEONTOLOGY SURVEY: YES [X] NO Survey [] PARTIAL Survey []

SURVEY RESULTS: Invertebrate [] Plant [] Vertebrate [X] Trace [] No Fossils Found []

Found one isolated black turtle shell fragment near the pipeline. This was not recorded as a locality.

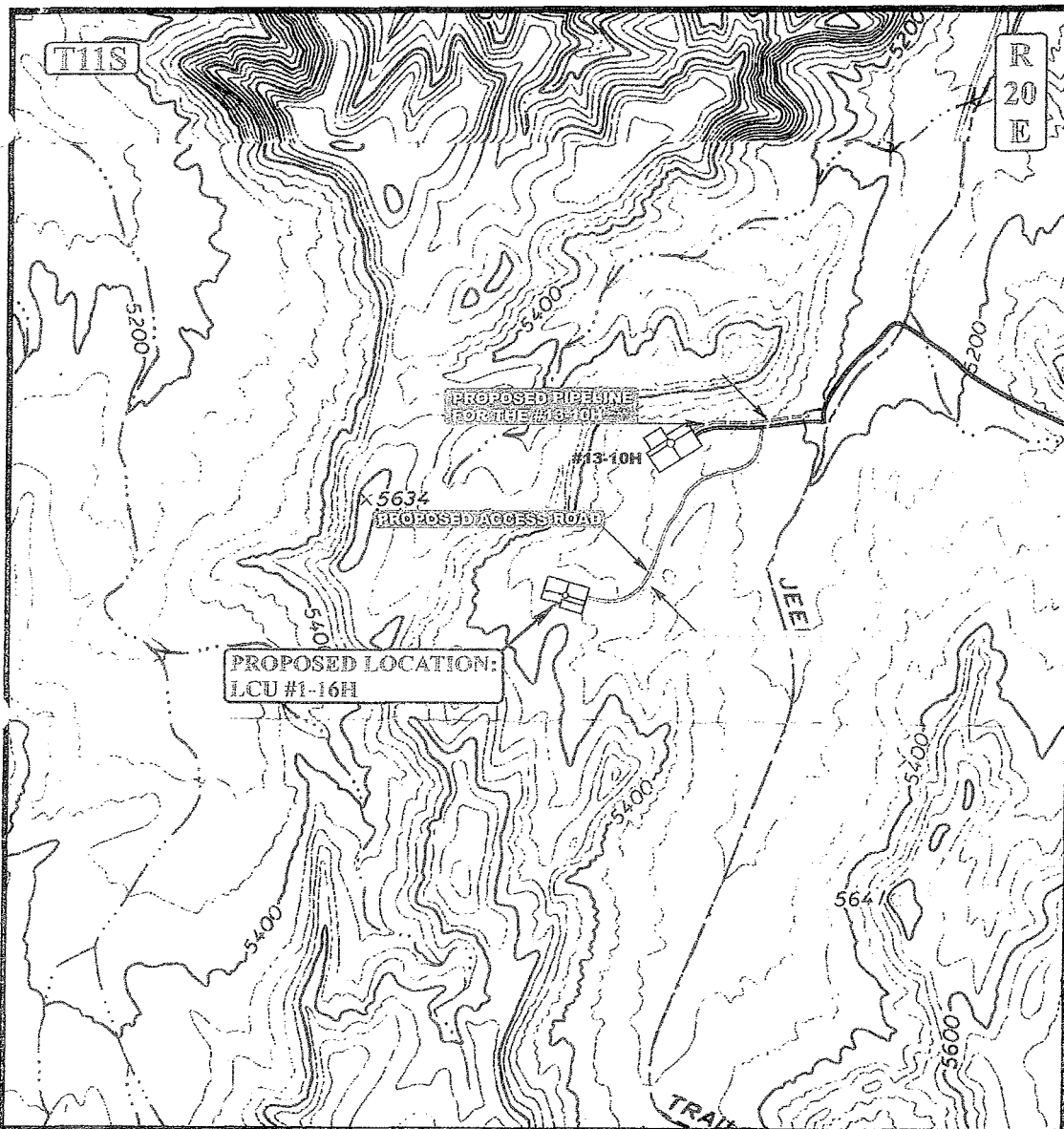
PALEONTOLOGY SENSITIVITY: HIGH [] MEDIUM [] LOW [X] (PROJECT SPECIFIC)

MITIGATION RECOMMENDATIONS: NONE [X] OTHER [] (SEE BELOW)

There is always some potential for discovery of significant paleontological resources in the Green River Formation. If significant vertebrate fossils (mammals, crocodiles, complete turtle shells, fish, etc.) are encountered during construction, work should stop in that area and a paleontologist should be contacted to evaluate the material discovered.

PALEONTOLOGIST: Alden H. Hamblin

A.H. Hamblin Paleontological Consulting, 3793 N. Minersville Highway, Cedar City, Utah 84720 (435) 867-8355
Utah State Paleontological Permit # 04-339, BLM paleontological Resources Permit # UT-S-05-02,
Ute Tribe Access Permits – 03/31/06 & 09/30/06. Utah Professional Geologist License – 5223011-2250.



LEGEND:

- PROPOSED ACCESS ROAD
- PROPOSED PIPELINE (SERVICING OTHER WELLS)

DOMINION EXPLR. & PROD., INC.

LCU #1-16H
SECTION 16, T11S, R20E, S.L.B.&M.
627' FNL 210' FEL



Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813



SCALE: 1" = 1000'			DRAWN BY: C.P.			REVISD: 00-00-00		
MONTH	DAY	YEAR						



XTO ENERGY, INC.
LCU #1-16H
SECTION 16, T11S, R20E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 9.1 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 6.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 2.0 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #13-10H TO THE WEST; FOLLOW ROAD FLAGS IN A WESTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE PROPOSED LOCATION.

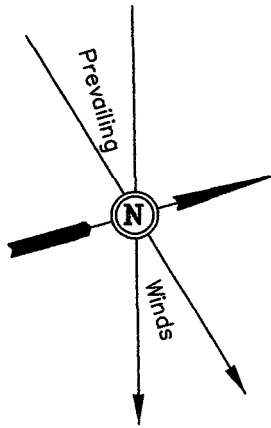
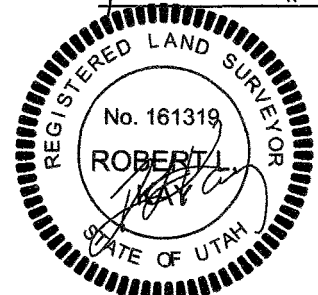
TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 49.2 MILES.

XTO ENERGY, INC.

LOCATION LAYOUT FOR

LCU #1-16H
SECTION 16, T11S, R20E, S.L.B.&M.
627' FNL 210' FEL

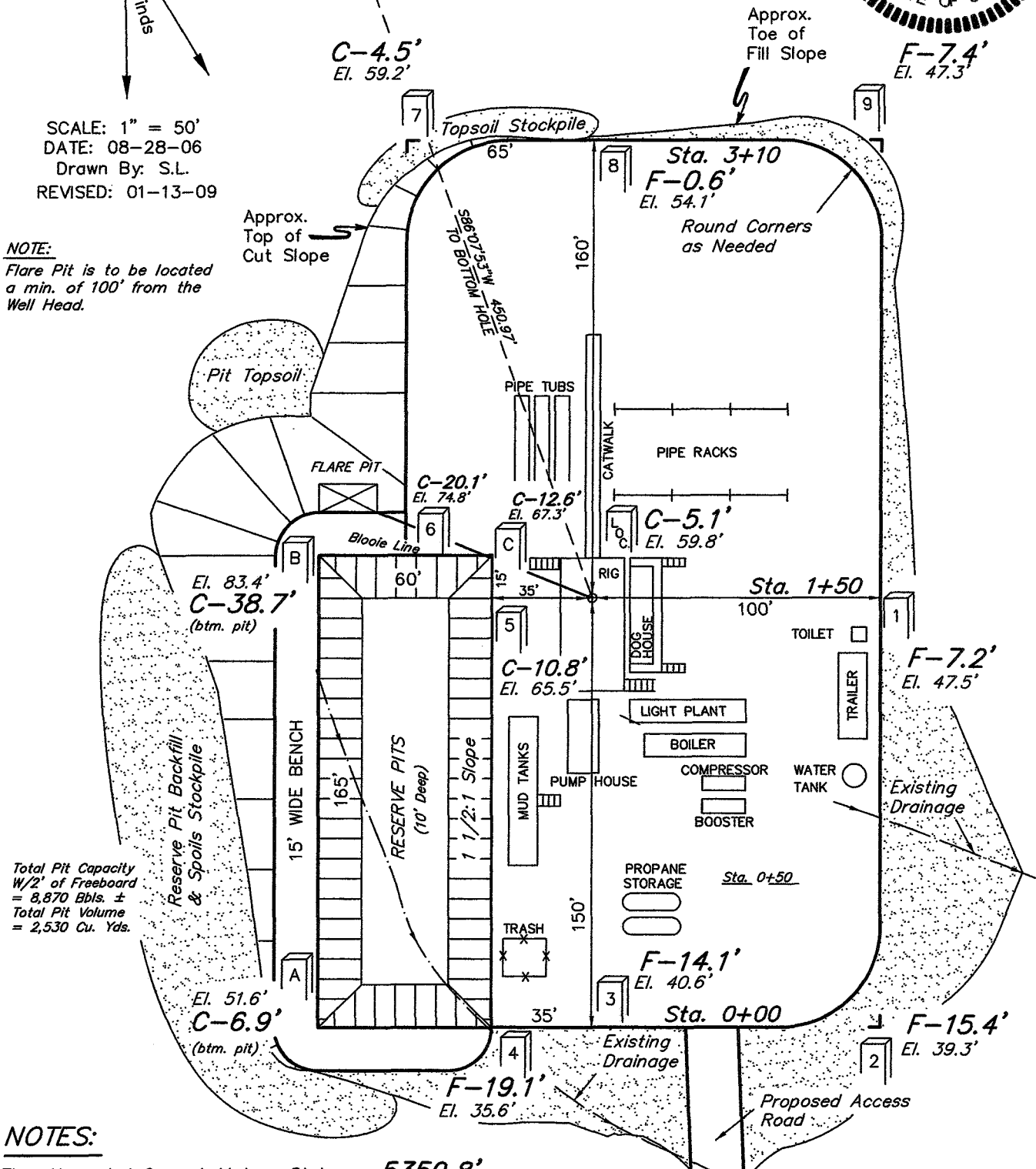
FIGURE #1



SCALE: 1" = 50'
DATE: 08-28-06
Drawn By: S.L.
REVISED: 01-13-09

NOTE:

Flare Pit is to be located
a min. of 100' from the
Well Head.



Total Pit Capacity
W/2' of Freeboard
= 8,870 Bbls. ±
Total Pit Volume
= 2,530 Cu. Yds.

NOTES:

Elev. Ungraded Ground At Loc. Stake = 5359.8'
FINISHED GRADE ELEV. AT LOC. STAKE = 5354.7'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1077

XTO ENERGY, INC.

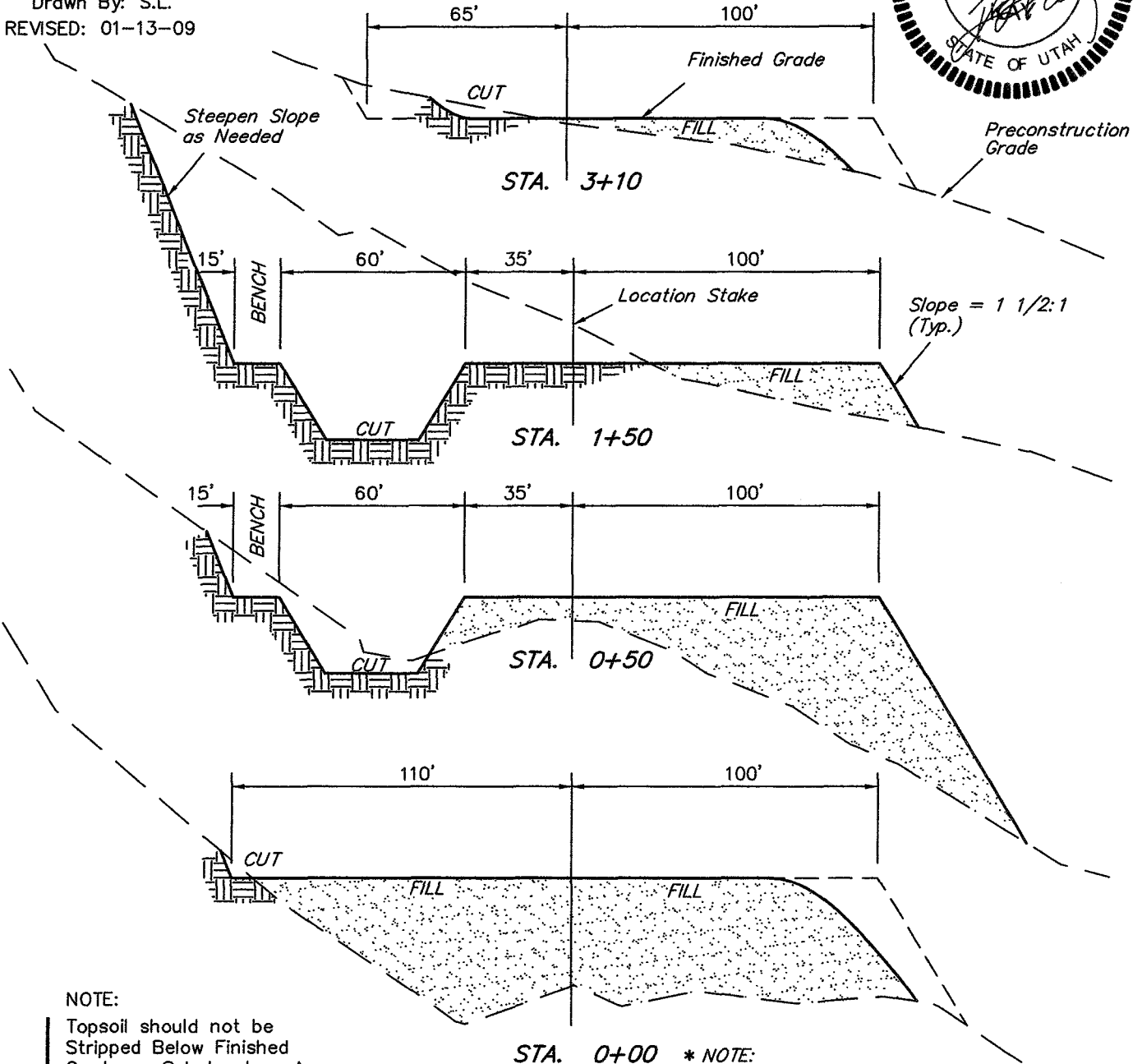
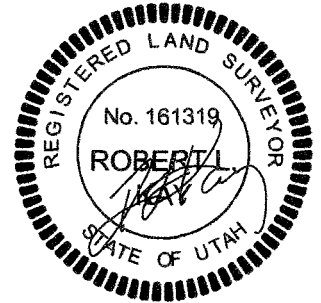
FIGURE #2

TYPICAL CROSS SECTIONS FOR

LCU #1-16H
SECTION 16, T11S, R20E, S.L.B.&M.
627' FNL 210' FEL

1" = 20'
X-Section
Scale
1" = 50'

DATE: 08-28-06
Drawn By: S.L.
REVISED: 01-13-09



NOTE:
Topsoil should not be
Stripped Below Finished
Grade on Substructure Area.

STA. 0+00 * NOTE:
FILL QUANTITY INCLUDES
5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT
(6") Topsoil Stripping = 1,780 Cu. Yds.
Remaining Location = 14,340 Cu. Yds.

TOTAL CUT = 16,120 CU.YDS.
FILL = 12,520 CU.YDS.

EXCESS MATERIAL = 3,600 Cu. Yds.
Topsoil & Pit Backfill = 3,050 Cu. Yds.
(1/2 Pit Vol.)
EXCESS UNBALANCE = 550 Cu. Yds.
(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

XTO ENERGY, INC.

LCU #1-16H

LOCATED IN UINTAH COUNTY, UTAH
SECTION 16, T11S, R20E, S.L.B.&M.



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHERLY



- Since 1964 -

UELS

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

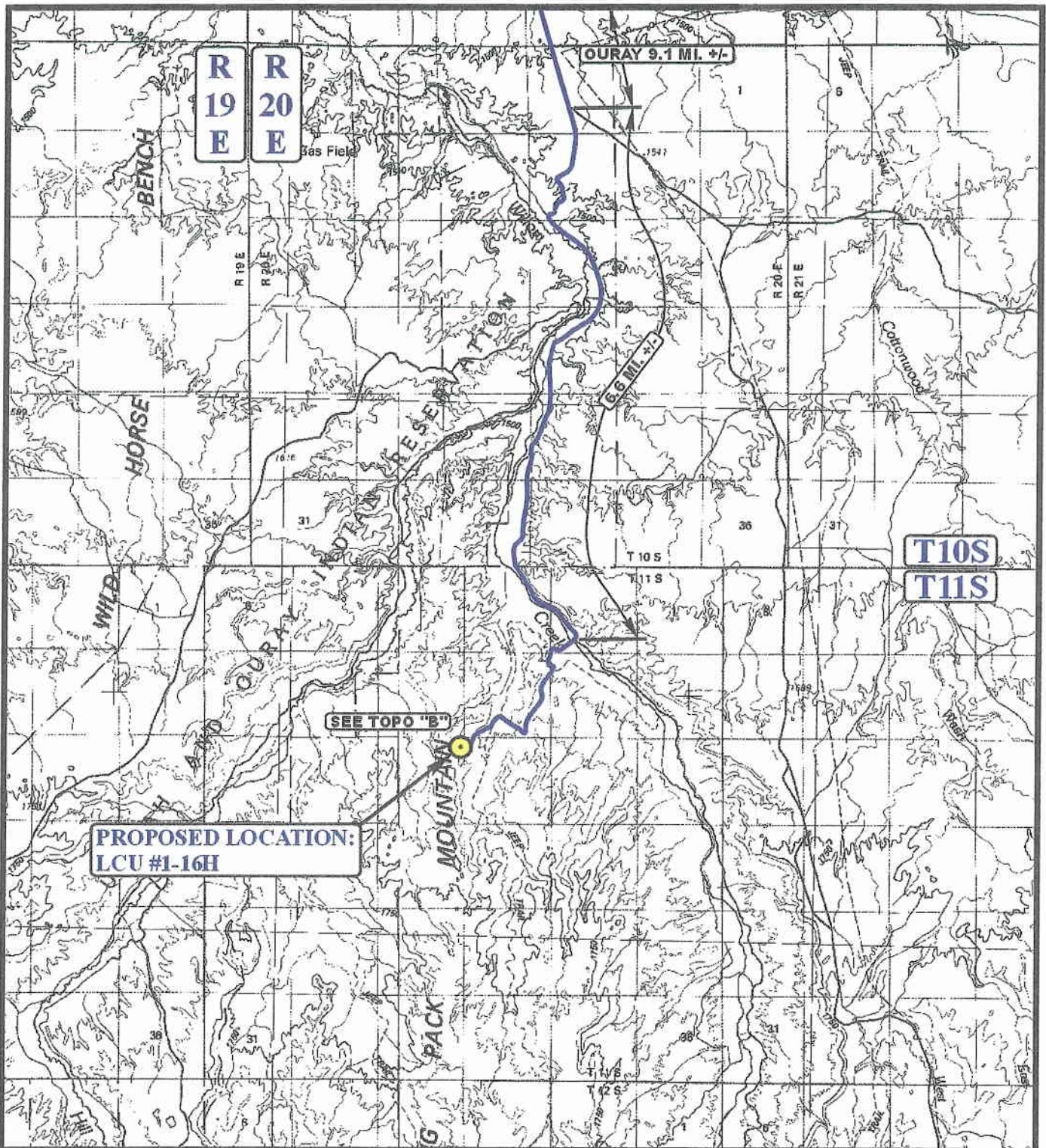
08 24 06
MONTH DAY YEAR

PHOTO

TAKEN BY: B.B.

DRAWN BY: C.P.

REV: 01-13-09 S.L.



LEGEND:

 PROPOSED LOCATION



XTO ENERGY, INC.

LCU #1-16H

SECTION 16, T11S, R20E, S.L.B.&M.

627' FNL 210' FEL



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TOPOGRAPHIC
MAP

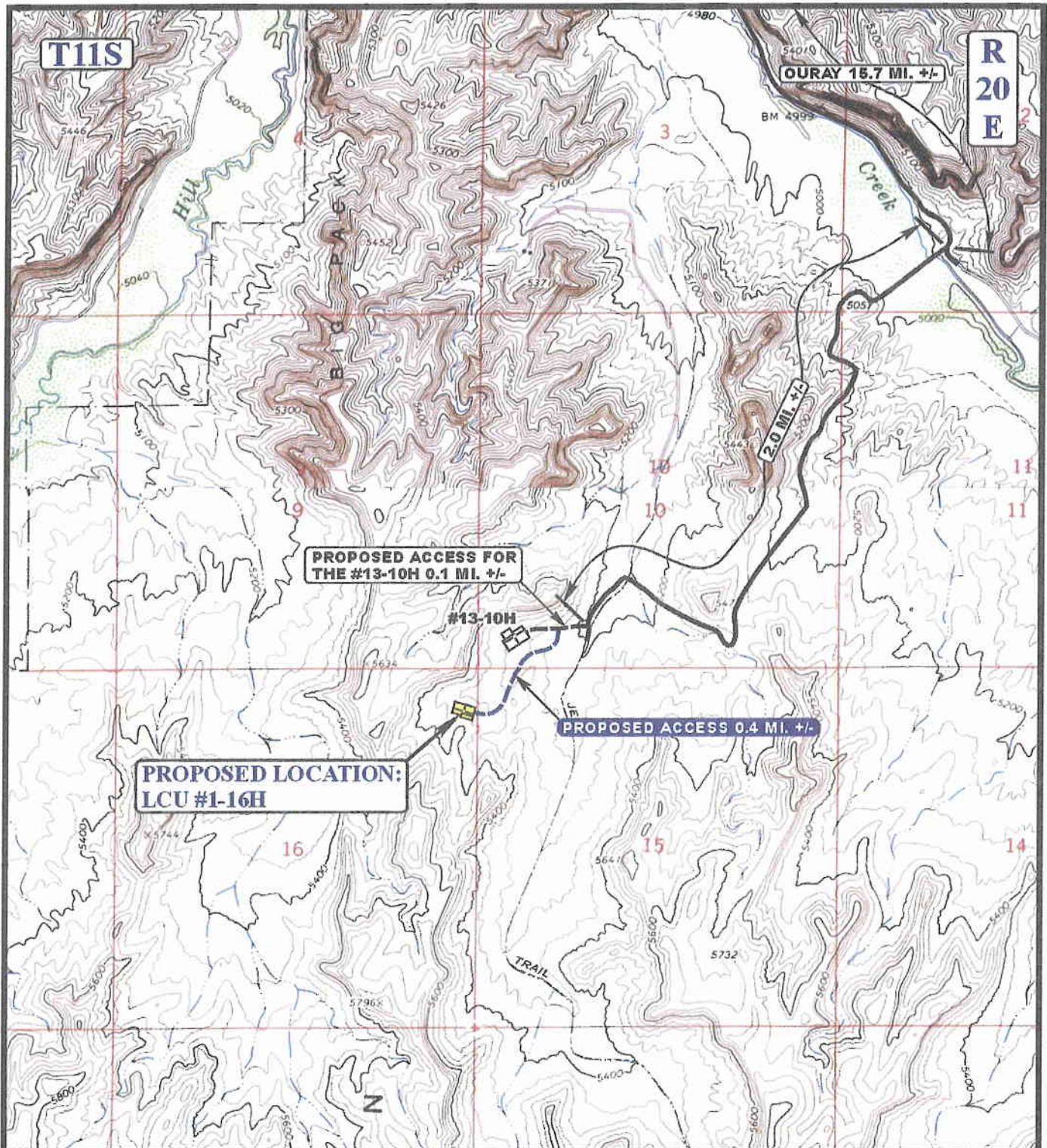
08 24 06
MONTH DAY YEAR

SCALE: 1:100,000



DRAWN BY: C.P.

REV: 01-13-09 S.L.





LEGEND:

 EXISTING ROAD
 PROPOSED ACCESS ROAD

XTO ENERGY, INC.

LCU #1-16H
 SECTION 16, T11S, R20E, S.L.B.&M.
 627' FNL 210' FEL

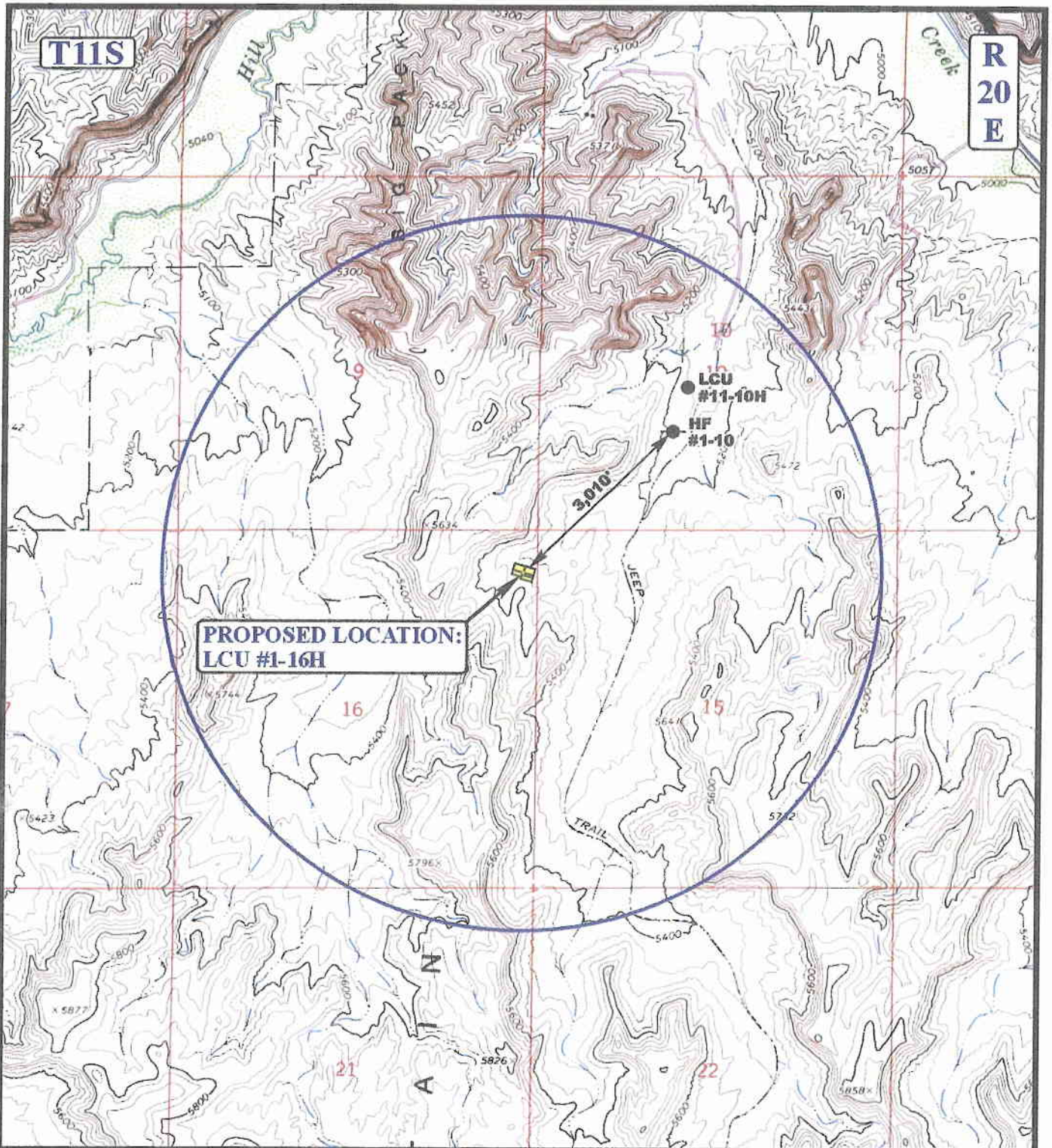


Utah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813



TOPOGRAPHIC MAP
 SCALE: 1" = 2000' DRAWN BY: C.P. REV: 01-13-09 S.L.

08 24 06
 MONTH DAY YEAR
B TOPO



LEGEND:

- | | |
|-------------------|-------------------------|
| ○ DISPOSAL WELLS | ○ WATER WELLS |
| ● PRODUCING WELLS | ● ABANDONED WELLS |
| ● SHUT IN WELLS | ● TEMPORARILY ABANDONED |



XTO ENERGY, INC.

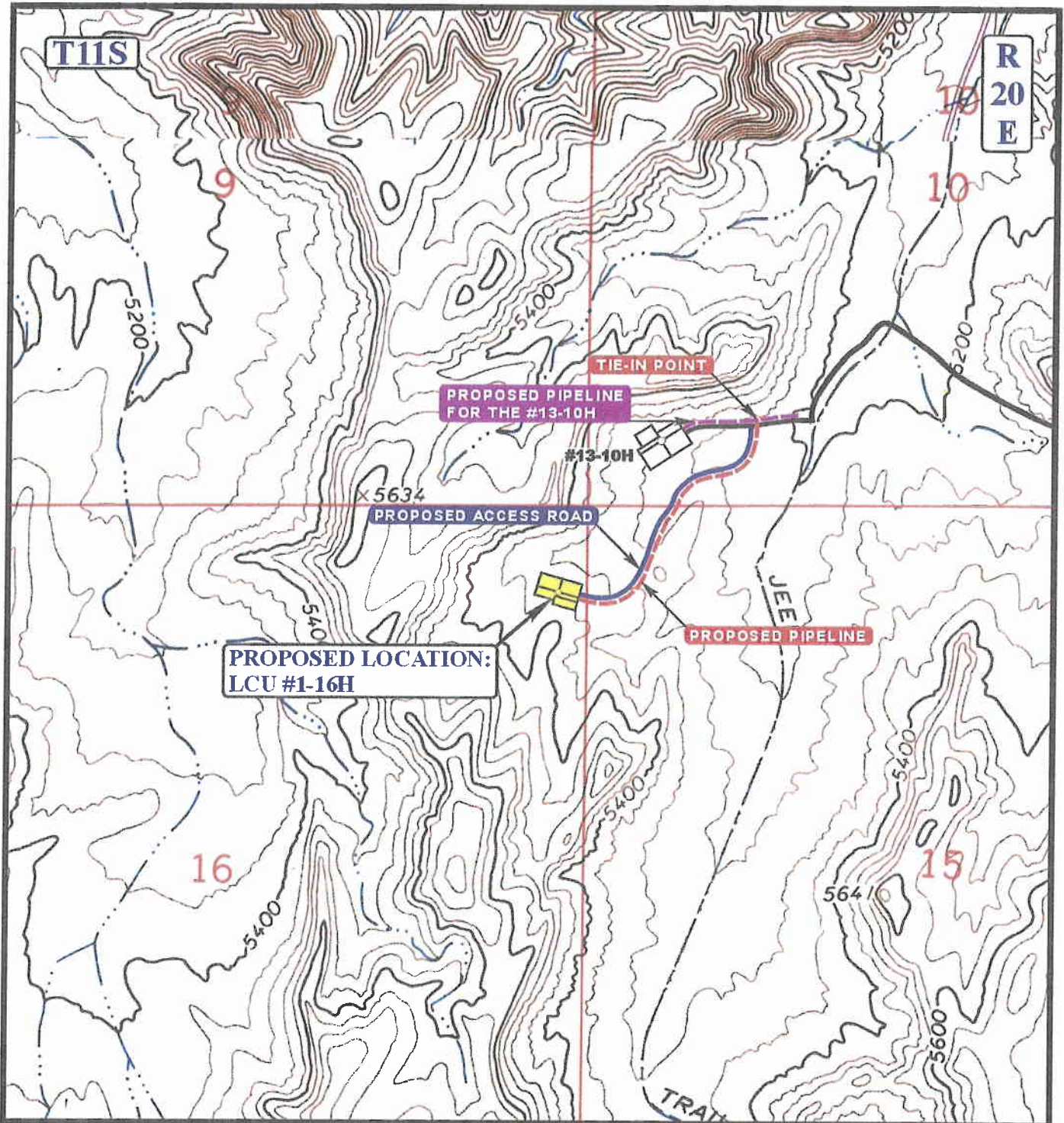
LCU #1-16H
SECTION 16, T11S, R20E, S.L.B.&M.
627' FNL 210' FEL



Uintah Engineering & Land Surveying
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TOPOGRAPHIC MAP **08 24 06**
 MONTH DAY YEAR
 SCALE: 1" = 2000' DRAWN BY: CP. REV: 01-13-09 S.L.





APPROXIMATE TOTAL PIPELINE DISTANCE = 2,066' +/-

LEGEND:

- PROPOSED ACCESS ROAD
- - - - - PROPOSED PIPELINE
- - - - - PROPOSED PIPELINE (SERVICING OTHER WELLS)

XTO ENERGY, INC.

LCU #1-16H

SECTION 16, T11S, R20E, S.L.B.&M.

627' FNL 210' FEL



Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813



TOPOGRAPHIC MAP

08	24	06
MONTH	DAY	YEAR

SCALE: 1" = 1000' DRAWN BY: C.P. REV: 01-13-09 S.L.

D
TOPO

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 01/22/2009

API NO. ASSIGNED: 43-047-40493

WELL NAME: LCU 1-16H

OPERATOR: XTO ENERGY INC (N2615)

CONTACT: DON HAMILTON

PHONE NUMBER: 435-722-4521

PROPOSED LOCATION:

NENE 16 110S 200E

SURFACE: 0627 FNL 0210 FEL

BOTTOM: 0660 FNL 0660 FEL

COUNTY: Uintah

LATITUDE: 39.86599 LONGITUDE: -109.6747

UTM SURF EASTINGS: 613354 NORTHINGS: 4413514

FIELD NAME: UNDESIGNATED (2)

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering	DKN	3/9/09
Geology		
Surface		

LEASE TYPE: 3 - State

LEASE NUMBER: ML-48772

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: WSMVD

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

☒ Plat
☒ Bond: Fed[] Ind[] Sta[] Fee[]
(No. 104312762)
☒ Potash (Y/N)
☒ Oil Shale 190-5 (B) or 190-3 or 190-13
☒ Water Permit
(No. 43-10991)
☒ RDCC Review (Y/N)
(Date:)
☒ Fee Surf Agreement (Y/N)
☒ Intent to Commingle (Y/N)

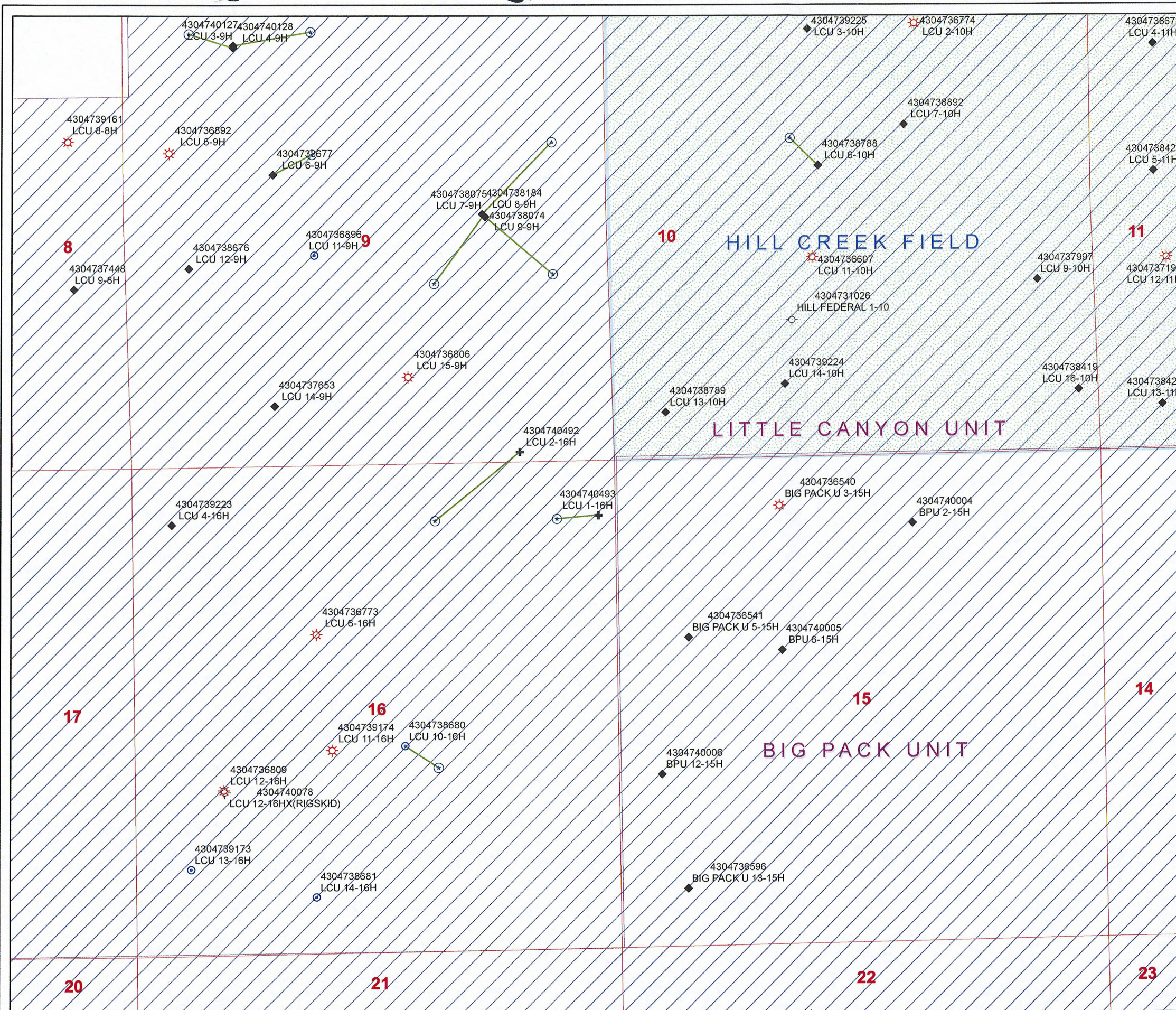
LOCATION AND SITING:

___ R649-2-3.
Unit: LITTLE CANYON *OK*
___ R649-3-2. General
Siting: 460' From Qtr/Qtr & 920' Between Wells
___ R649-3-3. Exception
☒ Drilling Unit
Board Cause No: 259-01
Eff Date: 8-18-2006
Siting: 460' fr u bdy of Uncomm. Tract
☒ R649-3-11. Directional Drill

COMMENTS:

STIPULATIONS:

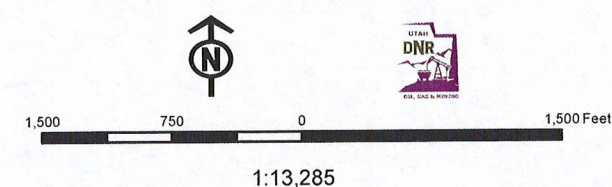
1. Federally Approved
2. STATEMENT OF BASIS



API Number: 4304740493
Well Name: LCU 1-16H
Township 11.0 S Range 20.0 E Section 16
Meridian: SLBM
Operator: XTO ENERGY INC

Map Prepared:
Map Produced by Diana Mason

Units	Wells Query Events
STATUS	✕ <all other values>
ACTIVE	GIS_STAT_TYPE
EXPLORATORY	<Null>
GAS STORAGE	APD
NF PP OIL	DRL
NF SECONDARY	GI
PI OIL	GS
PP GAS	LA
PP GEOTHERML	NEW
PP OIL	OPS
SECONDARY	PA
TERMINATED	PGW
Fields	POW
STATUS	RET
ACTIVE	SGW
COMBINED	SOW
Sections	TA
	TW
	WD
	WI
	WS



Application for Permit to Drill

Statement of Basis

3/12/2009

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
1325	43-047-40493-00-00		GW	F	No
Operator	XTO ENERGY INC		Surface Owner-APD		
Well Name	LCU 1-16H		Unit	LITTLE CANYON	
Field	UNDESIGNATED		Type of Work		
Location	NENE 16 11S 20E S 627 FNL 210 FEL GPS Coord (UTM) 613354E 4413514N				

Geologic Statement of Basis

XTO proposes to set 2,231 feet of surface casing cemented to the surface. The base of the moderately saline water is estimated at 3,900 feet. A search of Division of Water Rights records shows 1 water well within a 10,000 foot radius of the proposed location. This well is over a mile from the proposed location. The well depth is not listed. The well is owned by the BLM. Use is listed as stock/wildlife watering. The surface formation at this location is the Uinta Formation-Green River Formation transition. The Uinta Formation is made up of discontinuous sands interbedded with shales and are not expected to produce prolific aquifers. The Green River Formation is made up of interbedded sandstones, shales, and limestones. The Green River Formation can contain significant aquifers. The proposed casing and cementing programs should adequately protect any near surface aquifers. The production string cement should be brought up above the base of the moderately saline water to prevent it from mixing with fresher waters up hole.

Brad Hill

3/12/2009

APD Evaluator

Date / Time

Surface Statement of Basis

Surface rights at the proposed location are administered by the BLM. The operator is responsible for obtaining any needed permits and rights-of-way from the BLM.

Brad Hill

3/11/2009

Onsite Evaluator

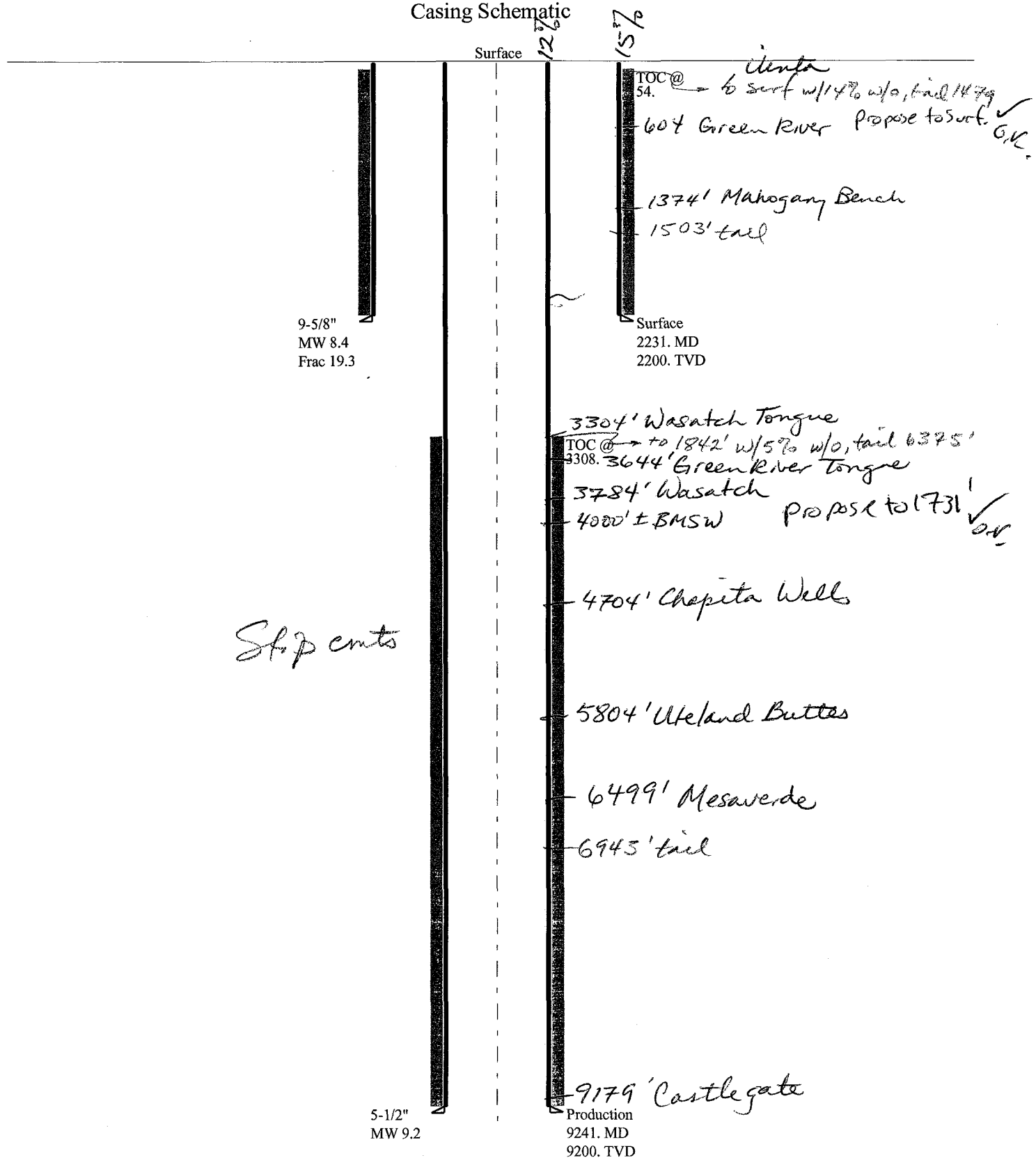
Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition
	None

43047404930000 LCU 1-16H

Casing Schematic



Well name:	43047404930000 LCU 1-16H	
Operator:	XTO Energy, Inc.	Project ID: 43-047-40493-0000
String type:	Surface	
Location:	Uintah County	

Design parameters:

Collapse

Mud weight: 8.400 ppg
Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 65 °F
Bottom hole temperature: 96 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 185 ft

Cement top: 54 ft

Burst

Max anticipated surface pressure: 1,936 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,200 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 1,952 ft

Directional Info - Build & Hold

Kick-off point 0 ft
Departure at shoe: 332 ft
Maximum dogleg: 3 °/100ft
Inclination at shoe: 10.93 °

Re subsequent strings:

Next setting depth: 9,200 ft
Next mud weight: 9.200 ppg
Next setting BHP: 4,397 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,200 ft
Injection pressure: 2,200 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	2231	9.625	36.00	J-55	ST&C	2200	2231	8.796	968.4

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	960	2020	2.104	2200	3520	1.60	79	394	4.97 J

Prepared Helen Sadik-Macdonald
by: Div of Oil, Gas & Mining

Phone: 810-538-5357

Date: February 3, 2009
Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Collapse is based on a vertical depth of 2200 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	43047404930000 LCU 1-16H	
Operator:	XTO Energy, Inc.	Project ID:
String type:	Production	43-047-40493-0000
Location:	Uintah County	

Design parameters:

Collapse

Mud weight: 9.200 ppg
Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 65 °F
Bottom hole temperature: 194 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 368 ft

Cement top: 3,308 ft

Burst

Max anticipated surface pressure: 2,373 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 4,397 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 7,958 ft

Directional Info - Build & Hold

Kick-off point 0 ft
Departure at shoe: 451 ft
Maximum dogleg: 3 °/100ft
Inclination at shoe: 0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	9241	5.5	17.00	N-80	LT&C	9200	9241	4.767	1206.2

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	4397	6290	1.431	4397	7740	1.76	156	348	2.23 J

Prepared Helen Sadik-Macdonald
by: Div of Oil, Gas & Mining

Phone: 810-538-5357

Date: February 3, 2009
Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Collapse is based on a vertical depth of 9200 ft, a mud weight of 9.2 ppg. The casing is considered to be evacuated for collapse purposes.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

BOPE REVIEW

XTO

LCU 1-16H

43-047-40493-0000

INPUT

Well Name

Casing Size (")

Setting Depth (TVD)

Previous Shoe Setting Depth (TVD)

Max Mud Weight (ppg)

BOPE Proposed (psi)

Casing Internal Yield (psi)

Operators Max Anticipated Pressure (psi)

XTO	LCU 1-16H	43-047-40493-0000
String 1	String 2	
10 3/4	5 1/2	
2200	9200	
0	2200	
8.4	9.2	✓
500	3000	
3520	7740	
4600	9.6 ppg	✓

Calculations	String 1	10 3/4 "
Max BHP [psi]	.052*Setting Depth*MW =	961
		BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	697 NO
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	477 YES
		*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	477 NO
Required Casing/BOPE Test Pressure		2200 psi
*Max Pressure Allowed @ Previous Casing Shoe =		0 psi
		*Assumes 1psi/ft frac gradient

Calculations	String 2	5 1/2 "
Max BHP [psi]	.052*Setting Depth*MW =	4401
		BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	3297 NO
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	2377 YES
		*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	2861 NO Reasonable
Required Casing/BOPE Test Pressure		3000 psi
*Max Pressure Allowed @ Previous Casing Shoe =		2200 psi
		*Assumes 1psi/ft frac gradient



JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

March 12, 2009

XTO Energy, Inc.
P O Box 1360
Roosevelt, UT 84066

Re: LCU 1-16H Well, 627' FNL, 210' FEL, NE NE, Sec. 16, T. 11 South, R. 20 East,
Bottom Location 660' FNL, 660' FEL, NE NE, Sec. 16, T. 11 South, R. 20 East,
Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-40493.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: Uintah County Assessor
SITLA
Bureau of Land Management, Vernal Office



Operator: XTO Energy, Inc.
Well Name & Number LCU 1-16H
API Number: 43-047-40493
Lease: ML-48772

Location: NE NE Sec. 16 T. 11 South R. 20 East
Bottom Location: NE NE Sec. 16 T. 11 South R. 20 East

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
- 24 hours prior to spudding the well – contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program – contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well – contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well – contact Dustin Doucet
- Any changes to the approved drilling plan – contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at: (801) 538-5338 office (801) 942-0871 home
- Carol Daniels at: (801) 538-5284 office
- Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

3. Reporting Requirements

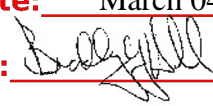
All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Page 2

43-047-40493

March 12, 2009

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
6. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.
7. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: ML-48772
1. TYPE OF WELL Gas Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: XTO ENERGY INC		7. UNIT or CA AGREEMENT NAME: LITTLE CANYON
3. ADDRESS OF OPERATOR: 382 Road 3100 , Aztec, NM, 87410		8. WELL NAME and NUMBER: LCU 1-16H
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0627 FNL 0210 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 16 Township: 11.0S Range: 20.0E Meridian: S		9. API NUMBER: 43047404930000
PHONE NUMBER: 505 333-3159 Ext		9. FIELD and POOL or WILDCAT: UNDESIGNATED
COUNTY: UTAH		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 3/12/2011 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION </div> <div style="width: 33%;"> <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER </div> <div style="width: 33%;"> <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: _____ </div> </div>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. XTO Energy hereby requests a one year extension on the State permit for the referenced well.		
Approved by the Utah Division of Oil, Gas and Mining Date: <u>March 04, 2010</u> By: 		
NAME (PLEASE PRINT) Eden Fine		PHONE NUMBER 505 333-3664
SIGNATURE N/A		TITLE Permitting Clerk
DATE 3/4/2010		



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047404930000

API: 43047404930000

Well Name: LCU 1-16H

Location: 0627 FNL 0210 FEL QTR NENE SEC 16 TWNP 110S RNG 200E MER S

Company Permit Issued to: XTO ENERGY INC

Date Original Permit Issued: 3/12/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? ☐ Yes ☒ No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? ☐ Yes ☒ No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? ☐ Yes ☒ No
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- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

**Approved by the
Utah Division of
Oil, Gas and Mining**

Signature: Eden Fine

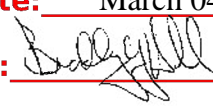
Date: 3/4/2010

Title: Permitting Clerk **Representing:** XTO ENERGY INC

Date: March 04, 2010

By: 

RECEIVED March 04, 2010

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9			
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PHONE NUMBER: 505 333-3159 Ext		9. FIELD and POOL or WILDCAT: UNDESIGNATED			
COUNTY: UTAH		STATE: UTAH			
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TYPE OF SUBMISSION	TYPE OF ACTION				
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 3/12/2011 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: _____ </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: _____
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Approved by the Utah Division of Oil, Gas and Mining					
Date: March 04, 2010					
By: 					
NAME (PLEASE PRINT) Eden Fine	PHONE NUMBER 505 333-3664	TITLE Permitting Clerk			
SIGNATURE N/A	DATE 3/4/2010				

RECEIVED March 04, 2010



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047404930000

API: 43047404930000

Well Name: LCU 1-16H

Location: 0627 FNL 0210 FEL QTR NENE SEC 16 TWNP 110S RNG 200E MER S

Company Permit Issued to: XTO ENERGY INC

Date Original Permit Issued: 3/12/2009

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- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

**Approved by the
Utah Division of
Oil, Gas and Mining**

Signature: Eden Fine

Date: 3/4/2010

Title: Permitting Clerk **Representing:** XTO ENERGY INC

Date: March 04, 2010

By: 

RECEIVED March 04, 2010

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: ML-48772
1. TYPE OF WELL Gas Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: XTO ENERGY INC		7. UNIT or CA AGREEMENT NAME: LITTLE CANYON
3. ADDRESS OF OPERATOR: 382 Road 3100 , Aztec, NM, 87410		8. WELL NAME and NUMBER: LCU 1-16H
PHONE NUMBER: 505 333-3159 Ext		9. API NUMBER: 43047404930000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0627 FNL 0210 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 16 Township: 11.0S Range: 20.0E Meridian: S		9. FIELD and POOL or WILDCAT: HILL CREEK
		COUNTY: UINTAH
		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 3/8/2012 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 XTO Energy hereby requests a one (1) year extension of the State APD for the referenced well.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: 03/09/2011

By:

NAME (PLEASE PRINT) Krista Wilson	PHONE NUMBER 505 333-3647	TITLE Permitting Tech
SIGNATURE N/A		DATE 3/8/2011



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047404930000

API: 43047404930000

Well Name: LCU 1-16H

Location: 0627 FNL 0210 FEL QTR NENE SEC 16 TWNP 110S RNG 200E MER S

Company Permit Issued to: XTO ENERGY INC

Date Original Permit Issued: 3/12/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? ☐ Yes ☒ No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? ☐ Yes ☒ No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? ☐ Yes ☒ No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? ☐ Yes ☒ No
- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

Signature: Krista Wilson

Date: 3/8/2011

Title: Permitting Tech **Representing:** XTO ENERGY INC

RECEIVED Mar. 08, 2011

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: ML-48772
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9. FIELD and POOL or WILDCAT: HILL CREEK		COUNTY: UINTAH
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 1/30/2013	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER:
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 XTO is requesting a one year extension to the approved APD.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: February 28, 2012

By:

NAME (PLEASE PRINT) Kelly Kardos	PHONE NUMBER 505 333-3145	TITLE Secd Sr. Permitting Tech
SIGNATURE N/A	DATE 2/23/2012	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047404930000

API: 43047404930000

Well Name: LCU 1-16H

Location: 0627 FNL 0210 FEL QTR NENE SEC 16 TWNP 110S RNG 200E MER S

Company Permit Issued to: XTO ENERGY INC

Date Original Permit Issued: 3/12/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

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- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

Signature: Kelly Kardos

Date: 2/23/2012

Title: Secd Sr. Permitting Tech **Representing:** XTO ENERGY INC



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

March 20, 2013

43 047 40493
LCU 1-16H
11S 20E 16

Rick Redus
XTO Energy Inc.
382 Road 3100
Aztec, NM 87410

Re: APDs Rescinded for XTO Energy Inc.
Uintah/Emery County

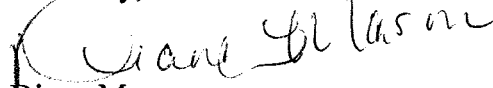
Dear Mr. Redus:

Enclosed find the list of APDs that you requested to be rescinded. No drilling activity at these locations has been reported to the division. Therefore, approval to drill these wells is hereby rescinded, effective March 20, 2013.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,


Diana Mason
Environmental Scientist

cc: Well File
Bureau of Land Management, Vernal
SITLA, Ed Bonner



Fwd: APDs

Brad Hill <bradhill@utah.gov>
To: Diana Mason <DIANAWHITNEY@utah.gov>

Wed, Mar 20, 2013 at 2:35 PM

Here are some you can get rid of.

----- Forwarded message -----

From: **Redus, Richard** <Richard_Redus@xtoenergy.com>
Date: Wed, Mar 20, 2013 at 2:31 PM
Subject: APDs
To: "bradhill@utah.gov" <bradhill@utah.gov>

Mr Hill,

Please cancel the below APD's as XTO will not be drilling these wells within the foreseeable future.

XTO ENERGY INC	4304737569	RBU 14-15F	DRILL	01/12/2006	01/12/2013
XTO ENERGY INC	4304752133	LCU 4-16H	DRILL	01/12/2012	01/12/2013
XTO ENERGY INC	4301530704	UT FED 18-7-22-24	DRILL	01/24/2007	01/24/2013
XTO ENERGY INC	4304737648	RBU 6-4E	DRILL	01/30/2006	01/30/2013
XTO ENERGY INC	4304737652	RBU 7-16F	DRILL	01/30/2006	01/30/2013
XTO ENERGY INC	4304737653	LCU 14-9H	DRILL	01/30/2006	01/30/2013
XTO ENERGY INC	4304751354	KC 15-32E	DRILL	02/03/2011	02/03/2013
XTO ENERGY INC	4304736295	RBU 10-21E	DRILL	02/09/2005	02/09/2013
XTO ENERGY INC	4304740524	RBU 30-23E	DRILL	02/10/2009	02/10/2013
XTO ENERGY INC	4304740529	RBU 21-24E	DRILL	02/10/2009	02/10/2013

XTO ENERGY INC	4304740530	RBU 28-23E	DRILL	02/10/2009	02/10/2013
XTO ENERGY INC	4304740531	RBU 23-23E	DRILL	02/10/2009	02/10/2013
XTO ENERGY INC	4304740532	RBU 31-23E	DRILL	02/10/2009	02/10/2013
XTO ENERGY INC	4304740533	RBU 25-23E	DRILL	02/10/2009	02/10/2013
XTO ENERGY INC	4304739050	LCU 15-4H	DRILL	02/12/2007	02/12/2013
XTO ENERGY INC	4304739051	KC 15-31E	DRILL	02/21/2007	02/21/2013
XTO ENERGY INC	4304752053	AP 14-2J	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752054	AP 16-2J	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752055	AP 5-2JX	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752102	LCU 16-36F	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752103	LCU 2-2H	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752104	LCU 4-2H	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752106	LCU 7-36F	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752108	LCU 2-36F	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752109	LCU 4-36F	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304739068	KC 7-33E	DRILL	03/05/2007	03/05/2013
XTO ENERGY INC	4304739069	KC 13-33E	DRILL	03/05/2007	03/05/2013
XTO ENERGY INC	4304739070	KC 15-33E	DRILL	03/05/2007	03/05/2013
XTO ENERGY INC	4304737748	RBU 14-16F	DRILL	03/09/2006	03/09/2013

XTO ENERGY INC	4304740588	RBU 22-24E	DRILL	03/11/2009	03/11/2013
XTO ENERGY INC	4304740492	LCU 2-16H	DRILL	03/12/2009	03/12/2013
XTO ENERGY INC	4304740493	LCU 1-16H	DRILL	03/12/2009	03/12/2013
XTO ENERGY INC	4304739158	LCU 15-3H	DRILL	03/28/2007	03/28/2013
XTO ENERGY INC	4304739159	LCU 5-3H	DRILL	03/28/2007	03/28/2013

Rick Redus

Permitting Specialist

XTO Energy Western Division

Wrk: 303-397-3712

Cell: 720-539-1673

From: bradhill@utah.gov [mailto:bradhill@utah.gov]

Sent: Monday, March 04, 2013 1:20 PM

To: Redus, Richard

Subject: Sundry For API Well Number 43047364300000

Notice of Intent: APD_EXTENSION API Number: 43047364300000 Operator: XTO ENERGY INC
Approved: 3/4/2013

—
Brad Hill P.G.
O & G Permitting Manager/Petroleum Geologist
State of Utah
Division of Oil, Gas, & Mining
Phone: (801)538-5315
Fax: (801)359-3940
email: bradhill@utah.gov



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Green River District

Vernal Field Office

170 South 500 East

Vernal, UT 84078

<http://www.blm.gov/ut/st/en/fo/vernal.html>



March 14, 2013

IN REPLY REFER TO:
3160 (UTG011)

Rick Redus
XTO Energy, Inc.
PO Box 6501
Englewood, CO 80155

43 047 40493

Re: Request to Return APD
Well No. LCU 1-16H
NENE, Sec. 16, T11S, R20E
Uintah County, Utah
Lease No. STATE (ML-48772)
Little Canyon Unit

RECEIVED

MAR 26 2013

DIV. OF OIL, GAS & MINING

Dear Mr. Redus:

The Application for Permit to Drill (APD) for the above referenced well received in this office on January 20, 2009, is being returned unapproved per your request to this office in an email message to Natural Resource Specialist David Gordon received on December 18, 2012. If you intend to drill at this location at a future date, a new APD must be submitted.

If you have any questions regarding APD processing, please contact Robin R. Hansen at (435) 781-3428.

Sincerely,

/s/ Jerry Kenczka

Jerry Kenczka
Assistant Field Manager
Lands & Resource Minerals

Enclosures

cc: UDOGM

bcc: Well File
Don Hamilton

RECEIVED

MAR 26 2013

DIV. OF OIL, GAS & MINING